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THE INTELLECTUAL PROPERTY CLAUSE'S EXTERNAL LIMITATIONS

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ABSTRACT

The text, structure, and history of the Intellectual Property Clause (IP Clause), as well as subsequent governmental activity, Supreme Court doctrine, and policy, show that the IP Clause limits Congress from using any of its other powers “To promote the Progress of Science and useful Arts” through laws that reach beyond the power conferred by the IP Clause to “secur[e] for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” That is, the evidence marshaled by this Article shows that the IP Clause externally limits Congress from seeking, via legislation, to promote the progress of science and useful arts, in any way other than by enacting laws that secure to authors and inventors exclusive rights in their writings and discoveries for limited times. Yet the story of Congress’s power in this area has another side: Since the late twentieth century, Congress has increasingly reached beyond the IP Clause’s means to promote the Clause’s ends, often asserting its expansive—and less limited—commerce and treaty powers. To some degree, this shift reflects the fact that laws regulating intellectual

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property often have multiple purposes, including trade and foreign-relations interests, which sometimes point in more expansive directions than do those of the more limited IP Clause. This Article synthesizes these competing purposes and provides an analytical framework under which courts, legislators, and others can assess the constitutionality of federal legislation. This framework affords a presumption against the constitutionality of laws that promote the IP Clause's ends but subvert its means, a presumption that may be overcome only by clear and convincing evidence that Congress, pursuant to its other more permissive powers, intentionally chose to supersede the IP Clause's means because of paramount, legitimate interests. This framework suggests that a number of existing federal laws, such as federal trade-secrecy provisions and antibootlegging laws, might be unconstitutional. The framework also suggests how to assess the constitutionality of laws that would protect databases, laws passed pursuant to international agreements with other countries, and laws that establish federal funding for scientific and artistic works.

TABLE OF CONTENTS

Introduction	1331
I. Understanding the IP Clause	1336
A. Text and Structure	1338
B. History	1345
1. Constitutional Convention	1345
2. Early Congressional Activity	1352
C. Judicial Doctrine	1359
D. Policy	1366
II. Framework for Evaluating Constitutionality	1372
A. Is the Law's Function To Promote Progress?	1373
B. Potential Conflicts	1379
1. Commerce Clause	1379
2. Spending Clause	1380
3. Necessary and Proper Clause	1383
4. Treaty Powers	1385
III. Unconstitutional Federal Laws?	1391
A. Trade Secrecy	1391
B. Antibootlegging	1396
C. Copyright Restoration	1402
D. Database Protection	1405
E. Federal Funding of Artistic and Scientific Works	1407
Conclusion	1413

INTRODUCTION

Could Congress enact perpetual copyright or patent protection? Could it grant copyright or patent rights to an entity other than a work's author or inventor, respectively? Could it protect against the copying of works that are not fixed in a tangible medium? A look at the Constitution's Intellectual Property Clause (IP Clause) alone suggests a probable-to-definite no to each of these questions. The IP Clause empowers Congress "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."¹

The power contemplated by the IP Clause, however, is not the only power that the Constitution confers on Congress. Most expansively, the Constitution also enables Congress, under the Commerce Clause, "To regulate Commerce . . . among the several States."² Moreover, the Constitution grants Congress authority to spend money in certain ways to "provide for the . . . general Welfare of the United States"³ and to "make all Laws which shall be necessary and proper for carrying into Execution" the federal government's enumerated powers.⁴ The Constitution also grants one house of Congress, the Senate, a considerable role in treaty-making.⁵ To the extent that congressional action fails to conform to the requirements of the IP Clause, then, could Congress nevertheless define or regulate rights in intellectual property by enacting any of the aforementioned expansive laws under these other powers?

This Article relies on the text, structure, and history of the IP Clause, as well as subsequent governmental activity, Supreme Court doctrine, and policy, to show that the IP Clause is set up to limit Congress from using any of its other Article I powers "To promote the Progress of Science and useful Arts" through laws that would

1. U.S. CONST. art. I, § 8, cl. 8. As a term, "the IP Clause" is inaccurate in at least two ways: neither the term "intellectual property" nor its abbreviation appears in the Clause itself, and the term encompasses trademark law, which is outside the Clause's scope. Dotan Oliar, *Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress's Intellectual Property Power*, 94 GEO. L.J. 1771, 1773 n.1 (2006); Edward C. Walterscheid, *Inherent or Created Rights: Early Views on the Intellectual Property Clause*, 19 HAMLINE L. REV. 81, 81 (1995); see also *infra* text accompanying notes 131–38.

2. U.S. CONST. art. I, § 8, cl. 3.

3. *Id.* art. I, § 8, cl. 1.

4. *Id.* art. I, § 8, cl. 18.

5. See *id.* art. II, § 2, cl. 2 ("[The President] shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur . . .").

reach beyond the scope of the power conferred by the IP Clause to “secur[e] for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”⁶ The evidence marshaled by this Article shows that if Congress seeks, via legislation, to promote the progress of science and useful arts, the only way it may do so is by enacting laws that secure to authors and inventors exclusive rights in their writings and discoveries for limited times.

The IP Clause’s text and placement within the constitutional structure suggest that Congress possesses power to pursue the goal of promoting the progress of science and useful arts, but only by using the means specified by the Clause itself: namely, securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. Additionally, the IP Clause’s history indicates that Congress cannot use other means to promote the specified end of promoting the progress of science and useful arts. For one thing, the Framers rejected other possible means of achieving this end, such as the ability to award grants and prizes.⁷ This choice implies that the Framers intended for Congress to use only the means explicitly identified in the Clause to achieve the Clause’s ends. Congress’s refusal in its earliest years to enact certain laws that would have sought to promote the progress of science and useful arts through means other than those laid out in the IP Clause—even means allotted to Congress by other constitutional provisions, such as the Commerce Clause—further confirms this understanding.⁸ Although the Supreme Court has never directly confronted the limitations that the IP Clause might impose on Congress’s other powers, its jurisprudence on the IP Clause, as well as its general understanding of clashes between two constitutional provisions, supports this interpretation.⁹ Finally, the policy embedded in the IP Clause of maintaining a careful balance between intellectual-property rights for creators on the one hand and the broader public benefit on the other demands that Congress not upset this balance by resorting to its other powers to further the IP Clause’s ends.¹⁰

6. I explore the implications of this Article’s analysis for preemption of state laws in Jeanne C. Fromer, *The Intellectual Property Clause’s Preemptive Effect*, in *INTELLECTUAL PROPERTY AND THE COMMON LAW* (Shyamkrishna Balganesh ed., forthcoming 2012).

7. See *infra* Part I.B.1.

8. See *infra* Part I.B.2.

9. See *infra* Part I.C.

10. See *infra* Part I.D.

In all, the evidence to which courts and scholars normally turn to interpret and construe the Constitution suggests that the IP Clause externally limits Congress from using its other powers to promote the progress of science and useful arts in ways that go beyond the IP Clause's means.

That said, there is a competing side to the story of Congress's power in this area. Congress can sometimes have legitimate interests in enacting laws that promote the progress of science and useful arts that extend beyond the IP Clause's means. For one thing, the Commerce Clause's reach has grown greatly since the United States' early years.¹¹ The Commerce Clause can reasonably be understood to extend to intellectual goods traditionally governed by the IP Clause because of those goods' use in commerce. Alternatively, globalization has led to the escalating use of treaties and other foreign agreements to govern intellectual property. Congress might view commerce or trade interests or foreign-relations concerns as distinct from the concerns of the IP Clause and thus as requiring the employment of means other than those specified in the IP Clause. Any theory of the extent of Congress's power to regulate in the area of intellectual property ought to address the fact that Congress might not be concerned merely with promoting the progress of science and useful arts, but also, for example, with promoting commerce or foreign relations.

These competing considerations give rise to an analytical framework under which courts, legislators, and others can assess the constitutionality of federal legislation. As a general matter, when legislation has the structural purpose of promoting the progress of science and useful arts, it must restrict itself to the means specified in the IP Clause. But with respect to laws that have multiple constitutional purposes, there ought to be a presumption against the constitutionality of laws that promote the IP Clause's ends but subvert its means, a presumption that may be overcome only by clear and convincing evidence that Congress, pursuant to its other more permissive powers, intentionally chose to supersede the IP Clause's means because of paramount, legitimate interests. This presumption ought to be significantly harder to overcome when a law's chosen means interfere with the IP Clause's means instead of merely diverging from the means included in the IP Clause. This framework suggests that a number of modern federal laws, such as the trade-

11. See *infra* text accompanying notes 233–36.

secrecy laws and antibootlegging laws, might be unconstitutional. The framework also demonstrates how to assess the constitutionality of laws that would protect databases, laws passed pursuant to international agreements, and laws that establish federal funding for scientific and artistic works. Because Congress, since the late twentieth century, has increasingly been legislating at or beyond this constitutional boundary, having a framework with which to assess the constitutionality of certain laws at the outer margins is increasingly important.

This Article's proposed framework is different from analyses set out by previous works. Professor Thomas Nachbar, for instance, maintains that the IP Clause does not limit Congress's other powers.¹² I disagree.

Other scholars focus on the internal limitations of the IP Clause. For example, Professor Lawrence Solum maintains that the Clause is characterized by a unique means-end structure that constrains the granted power.¹³ Professor Dotan Oliar similarly argues that restrictions inhere in the IP Clause—specifically, that the IP Clause allows Congress to enact intellectual-property laws only if they promote the progress of science and useful arts—but does not push further to understand how the IP Clause's boundaries might or might not limit Congress's other powers.¹⁴ Given the expansiveness of

12. See Thomas B. Nachbar, *Intellectual Property and Constitutional Norms*, 104 COLUM. L. REV. 272 (2004) ("The Intellectual Property Clause and its limits do not represent generally applicable constitutional norms and Congress may therefore legislate pursuant to the Commerce Clause without regard to the Intellectual Property Clause or its limits."); cf. Edward C. Walterscheid, *The Nature of the Intellectual Property Clause: A Study in Historical Perspective* (pt. 1), 83 J. PAT. & TRADEMARK OFF. SOC'Y 763 (2001) [hereinafter Walterscheid, *IP Clause*] (arguing that the IP Clause "provides a broader scope of authority to Congress than merely the power to create patents and copyrights, while at the same time [containing] limitations on the patent and copyright power that are only in recent years coming to be understood"); Edward C. Walterscheid, *To Promote the Progress of Science and Useful Arts: The Anatomy of a Congressional Power*, 43 IDEA 1 (2002) [hereinafter Walterscheid, *To Promote*] (maintaining that the IP Clause's "'by securing' language is intended as an explanation of the generic grant of power set forth in the 'to promote' language as specifically including authority regarding patents and copyrights," but that "there are both express and inherent limitations in the Clause taken as a whole which qualify and limit the patent and copyright power of Congress[,] . . . [and that i]n particular, the introductory language 'to promote' restrains such power").

13. Lawrence B. Solum, *Congress's Power To Promote the Progress of Science*: Eldred v. Ashcroft, 36 LOY. L.A. L. REV. 1, 11 (2002).

14. See Oliar, *supra* note 1, at 1822, 1824–45 (focusing on the policy implications of understanding the first half of the IP Clause as limiting Congress's authority to enact laws that in actuality promote the progress of science and useful arts, and considering how courts might enforce that restriction); see also Dotan Oliar, *The (Constitutional) Convention on IP: A New*

Congress's other powers, such as the powers conveyed by the Commerce and Spending Clauses, this question is even more critical than the question of the IP Clause's internal meaning alone.

Some works propose that the IP Clause restrains Congress's other powers. These works, however, tend to be undertheorized, do not extend as far as my analysis does, or suggest a complex analysis. The recurring suggestion that the IP Clause's specific power limits more general powers elsewhere in the Constitution is undertheorized.¹⁵ In an in-depth analysis, Professor Yochai Benkler extrapolates from some Supreme Court decisions and builds on policy to read the IP Clause's grant of power as limiting Congress to granting exclusive rights in information only when that information makes an "original contribution[] to the wealth of human knowledge" not already in the public domain.¹⁶ Similarly, former Professor William Patry reads the IP Clause as preventing Congress from undermining the public's right to copy unoriginal material.¹⁷ My analysis suggests going further in some ways and less far in others. Professors Paul Heald and Suzanna Sherry perceive a complex constellation of principles in the IP Clause that tie Congress's hands in enacting other legislation. In their view, the IP Clause is the only relevant power with respect to "legislation that imposes monopoly-like costs on the public through the granting of exclusive rights," and any law passed under it must, in exchange for granting a right to a contribution's creator, provide a new contribution to the public, in the

Reading, 57 UCLA L. REV. 421, 423 (2009) (characterizing his own previous work on the IP Clause as "[ma]king one major argument": that "[t]he Framers intended the progress language in the Clause—'to promote the progress of science and useful art'—to limit Congress's power to grant IP rights").

15. See, e.g., Rochelle Cooper Dreyfuss, *A Wiseguy's Approach to Information Products: Muscling Copyright and Patent into a Unitary Theory of Intellectual Property*, 1992 SUP. CT. REV. 195, 230 ("Restrictions on constitutional grants of legislative power, such as the Copyright Clause, would be meaningless if Congress could evade them simply by announcing that it was acting under some broader authority."); Malla Pollack, *The Right To Know?: Delimiting Database Protection at the Juncture of the Commerce Clause, the Intellectual Property Clause, and the First Amendment*, 17 CARDOZO ARTS & ENT. L.J. 47, 60 (1999) ("Accepting that Congress may not do an end run around a limitation in one clause of the Constitution by invoking a more general clause, Congress may not grant (at least some types of) exclusive rights to something close to, but not quite, the writings of authors or the discoveries of inventors.").

16. Yochai Benkler, *Constitutional Bounds of Database Protection: The Role of Judicial Review in the Creation and Definition of Private Rights in Information*, 15 BERKELEY TECH. L.J. 535, 538–46 (2000).

17. William Patry, *The Enumerated Powers Doctrine and Intellectual Property: An Imminent Constitutional Collision*, 67 GEO. WASH. L. REV. 359, 364–66 (1999).

form of access to the work presently and free access eventually when it enters the public domain.¹⁸

Part I uses the IP Clause's structure, text, history, judicial doctrine, and policy to build the case that the Clause ought to be understood as both a grant of limited power and a limitation on Congress's authority to use its other enumerated powers to promote the progress of science and useful arts by means other than those specified in the Clause. Part II uses this evidence to construct a framework for assessing the constitutionality of legislation and suggests how to evaluate the potential conflicts that might arise between the IP Clause power and other constitutional powers, most notably the commerce, spending, necessary-and-proper, and treaty powers. This Part incorporates the insight that a law regulating intellectual property might have multiple legitimate constitutional purposes. Part III builds on this framework to suggest that a number of existing and potential federal laws are of questionable constitutionality.

I. UNDERSTANDING THE IP CLAUSE

Most scholars and courts that have examined the IP Clause have dwelled on whether the first half of the Clause—"To promote the Progress of Science and useful Arts"—is a restraint on Congress's authority to enact intellectual-property laws. That is, can Congress enact intellectual-property laws if they do not, in actuality, promote this progress? For example, both Justice Breyer and Professor Oliar rely on history, constitutional structure, and policy considerations to conclude that the progress provision is an independent restriction.¹⁹

18. Paul J. Heald & Suzanna Sherry, *Implied Limits on the Legislative Power: The Intellectual Property Clause as an Absolute Constraint on Congress*, 2000 U. ILL. L. REV. 1119, 1160 (emphasis omitted).

19. See, e.g., *Eldred v. Ashcroft*, 537 U.S. 186, 242–67 (2003) (Breyer, J., dissenting) (arguing that the IP Clause limits congressional power based on the history and text of the IP Clause and policy considerations); JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 170, 208, 210 (2008) (arguing, after considering the constitutional text, "Jeffersonian ideals," and policy concerns, that the IP Clause limits congressional power); WILLIAM PATRY, *MORAL PANICS AND THE COPYRIGHT WARS* 123 (2009) ("The Constitution is quite clear that Congress can only grant copyright to promote the progress of science, and thus this 'burden' exists from the inception of the rights, and follows those rights for the duration of the copyright."); Oliar, *supra* note 1, at 1772–73, 1778–79 (arguing, after considering the Framers' intent, that the IP Clause limits congressional power); Malla Pollack, *What Is Congress Supposed To Promote?: Defining "Progress" in Article I, Section 8, Clause 8 of the United States Constitution, or Introducing the Progress Clause*, 80 NEB. L. REV. 754, 770–71 (2001) (reasoning that Congress cannot use its Commerce Clause powers to enact intellectual-

This particular line of research focuses chiefly on the IP Clause's internal limits, not on its external limits—in other words, whether the Clause limits Congress's other powers. Such scholarship is compatible with this Article's analytical framework, but it ultimately falls outside of this Article's scope.

This Article understands the IP Clause's first part as a purposive channeling mechanism. That is, if Congress desires to promote the progress of science and useful arts, it may do so only by awarding to authors and inventors the exclusive right in their writings and discoveries for limited times. Moreover, Congress may not use its other enumerated powers to promote the progress of science and useful arts by using means other than those specified in the IP Clause. In this way, the IP Clause externally limits Congress's other powers. As I discuss in this Part, text, history, constitutional structure, Supreme Court doctrine, and policy strongly support this understanding.

Others have concluded otherwise. According to Professor Nachbar, the Constitution does not restrain Congress from enacting laws that do not conform to the IP Clause's specified means.²⁰ He states that no good evidence—historical or otherwise—supports the proposition that the IP Clause was intended to limit Congress's other powers, such as its powers under the far-reaching Commerce Clause.²¹ Nachbar asserts that the IP Clause was not much debated at the Constitutional Convention and that it is “a relatively insignificant form of economic regulation allocating quasi-property rights between private entities.”²² Therefore, he sees the IP Clause as being far from a central structural concept in the constitutional framework.²³ Moreover, Nachbar detects no constitutional norms—in either the IP

property protection that does not promote the progress of science and useful arts); Edward C. Walterscheid, *The Preambular Argument: The Dubious Premise of Eldred v. Ashcroft*, 44 IDEA 331, 333 (2004) (“[T]he preambular argument which treats the ‘to promote’ language as a preamble which places little or no constraint on the legislative power of Congress is the most dubious and least tenable of the various interpretations that have been given to the Science and Useful Arts Clause.”); cf. Andrew M. Hetherington, Comment, *Constitutional Purpose and Inter-Clause Conflict: The Constraints Imposed on Congress by the Copyright Clause*, 9 MICH. TELECOMM. & TECH. L. REV. 457, 470 (2003) (arguing that the Clause's first part serves to reject a natural-rights approach to intellectual property by emphasizing that the purpose of intellectual-property laws is utilitarian).

20. Nachbar, *supra* note 12, at 276–77.

21. *Id.* at 277.

22. *Id.* at 291.

23. *Id.* at 291–92.

Clause or the First Amendment—that ought to restrain Congress from enacting intellectual-property laws beyond the IP Clause’s limits, whereas he argues that Congress, as a matter of policy, ought to decide the IP Clause’s boundaries vis-à-vis Congress’s other powers.²⁴

Walterscheid takes a somewhat related position, although via another analytical route. He suggests that although the IP Clause ties Congress’s hands broadly by requiring that certain laws not impose “monopoly-like costs on the public,” among other restrictions, it also gives Congress power to promote the progress of science and useful arts by various means, including but not limited to the copyright and patent powers described in the Clause.²⁵

This Part disagrees by showing that the IP Clause externally limits Congress’s other powers. The following sections in turn analyze the Clause’s text, structure, and history, as well as Supreme Court doctrine and policy, to make the case.

A. *Text and Structure*

The U.S. Constitution confers upon Congress power “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”²⁶ To understand the IP Clause’s reach, one should first examine this text and its surrounding constitutional structure. As Professor Laurence Tribe explains, “[A]ny ‘interpretation’ of a constitutional term or provision must at least seriously address the entire text out of which a particular fragment has been selected for interpretation, and must at least take seriously the architecture of the institutions that the text defines.”²⁷ This examination, although not conclusive, suggests a clause that allows Congress to promote the progress of science and useful arts

24. *Id.* at 318, 344. According to Professor Nachbar, the First Amendment limits congressional power under the IP Clause, but it does not thereby impose external limits on Congress’s other powers. *Id.* at 319–20. *But see* Steven J. Horowitz, *A Free Speech Theory of Copyright*, 2009 STAN. TECH. L. REV. 2, ¶ 3 (arguing that the Copyright Clause’s limits are free-speech limits and are thus enforceable as individual rights). My approach is consistent with either view of the First Amendment.

25. Walterscheid, *To Promote*, *supra* note 12, at 79–80; *see also* Walterscheid, *IP Clause*, *supra* note 12, at 767–68.

26. U.S. CONST. art. I, § 8, cl. 8.

27. Laurence H. Tribe, *Taking Text and Structure Seriously: Reflections on Free-Form Method in Constitutional Interpretation*, 108 HARV. L. REV. 1221, 1233 (1995) (emphasis omitted).

only by the means specified in the Clause, even if Congress might otherwise assert another textual source of authority for its action.

Some view the first part of the IP Clause as nothing more than a nonbinding preamble.²⁸ This interpretation cannot be correct. For one thing, it requires reading the first half both unnaturally and as a nullity, contrary to the basic rule of construction that every word of the Constitution must be given meaning.²⁹ This construction also confers a different grammatical understanding on the IP Clause than on the other Article I, Section 8 powers. As James Monroe long ago observed, each of the enumerated powers listed in Article I, Section 8 begins with a grant of power.³⁰ Read correctly, the IP Clause fits this scheme because, like all of the other enumerated powers, the first part of the Clause begins with a “To,” followed by the power that is being granted.³¹

In another way, however, the IP Clause is structured differently from the other Article I, Section 8 powers. It is the only clause that specifies the means for carrying out the allotted power:³² “by securing

28. See 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 1.03[A] (2011) (“[T]he phrase ‘To promote the progress of science and useful arts . . .’ must be read as largely in the nature of a preamble, indicating the purpose of the power but not in limitation of its exercise.” (omission in original) (footnotes omitted)).

29. See, e.g., Oliar, *supra* note 1, at 1787 (“The last justification for the limiting operation of the Progress Clause has been to use the general interpretive presumption according to which each and every word and phrase in the Constitution should be given meaning. Some argued that interpreting the Progress Clause as a non-binding preambular statement of purpose would render it meaningless and thus should be rejected.” (footnote omitted)); Solum, *supra* note 13, at 22 (“Given the plain language of the Intellectual Property Clause and the structure of Article I, Section 8, the notion that the Clause consists of a preamble followed by a power grant is simply unsustainable.”); Hetherington, *supra* note 19, at 465 (“[I]t seems strange that the power to promote progress would be mentioned at all, unless it was intended as a purposive element in the clause.”).

30. James Monroe, Views of the President of the United States on the Subject of Internal Improvements (May 4, 1822), *reprinted in* 2 A COMPILATION OF THE MESSAGES AND PAPERS OF THE PRESIDENTS 1789–1897, at 144, 163 (James D. Richardson ed., 1896).

31. Solum, *supra* note 13, at 13–20; see also Walterscheid, *IP Clause*, *supra* note 12, at 767 (“The clause is . . . treated as though the grant of power is: ‘To secure for limited times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.’ . . . A major disadvantage is that this is not literally the language of the clause, and such interpretation renders its grammatical construction quite different than that afforded to every other enumerated congressional power.”).

32. Solum, *supra* note 13, at 19–20; Walterscheid, *IP Clause*, *supra* note 12, at 774–75. The Militia Clause has a related structure: it confers upon Congress power “To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions.” U.S. CONST. art. I, § 8, cl. 15. Professor Lawrence Solum understands this Clause to enable Congress to execute the Union’s laws, suppress insurrections, or repel invasions by calling forth the militia. Solum, *supra* note 13, at 19. Unlike the IP Clause, this Clause’s placement of means

for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” The natural reading of this clause, given its unique structure, is that Congress has the power to promote the progress of science and useful arts using solely the specified means.³³ The word “by,” preceded by a comma, links the first part of the Clause to the second part, suggesting a means-end relationship between the two.³⁴ By comparison, consider two typically structured clauses in Article I, Section 8, both of which lack any description of the means by which Congress is to achieve the identified ends: the Commerce Clause, which grants Congress power “To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes,”³⁵ and the Postal Clause, which gives Congress authority “To establish Post Offices and post Roads.”³⁶

As the Supreme Court indicated during its constitutional interpretation in *Marbury v. Madison*,³⁷ “[a]ffirmative words are often, in their operation, negative of other objects than those affirmed.”³⁸ Legal scholars have long pointed out how the Constitution achieved exactly this effect by enumerating only certain federal powers.³⁹ Similar limitations arguably exist elsewhere in Article I, Section 8, such as in the provision granting Congress power to raise and support armies, but with no appropriation of money

before ends carries no suggestion that Congress may not use its other powers to execute the nation’s laws, suppress insurrections, and repel invasions. *Cf. id.* at 20 (“Unlike the second Militia Clause, the Intellectual Property Clause grants the power to pursue a goal and then qualifies that power by specifying the permissible means.”). Were the IP Clause to have the same structure as the Militia Clause, by providing Congress power “to secure for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries to promote the Progress of Science and useful Arts,” it would not carry the same textual implication—that the Clause’s goals may be promoted only through one specified avenue. *See id.* (“The alternative [to the IP Clause’s structure] would be a power to employ any means that furthered the goal, and such a power would not fit the general design of Article I, Section 8, which lays out a scheme of limited and enumerated powers.”).

33. Solum, *supra* note 13, at 20.

34. Hetherington, *supra* note 19, at 467.

35. U.S. CONST. art. I, § 8, cl. 3.

36. *Id.* art. I, § 8, cl. 7.

37. *Marbury v. Madison*, 5 U.S. (1 Cranch) 137 (1803).

38. *Id.* at 174. Professor Malla Pollack further points out that “[n]egative implication was a common eighteenth century method of legal drafting.” Pollack, *supra* note 19, at 771 n.88 (citing THE FEDERALIST NOS. 32, 83, 84 (Alexander Hamilton)).

39. *E.g.*, 1 WILLIAM WINSLOW CROSSKEY, POLITICS AND THE CONSTITUTION IN THE HISTORY OF THE UNITED STATES 486–90 (1953); Gary Lawson, *Delegation and Original Meaning*, 88 VA. L. REV. 327, 336–43 (2002).

lasting for more than two years; in the provision giving it power to establish a uniform rule of naturalization; and in the provision granting power to make uniform bankruptcy laws.⁴⁰ As discussed in Section B, the historical evidence more comprehensively supports this means-end textual reading of the IP Clause. Together, these sections suggest that the IP Clause authorizes only the specified means to promote the progress of science and useful arts.

Even so, might Congress use its other powers to employ different means to promote the progress of science and useful arts? James Madison—a central figure in the Constitution’s making⁴¹—believed that a congressional power ought to be enumerated in a separate provision only if it did not fall within any of the other enumerated powers.⁴² This line of thinking suggests that Congress cannot use its other powers to regulate intellectual property, at least with regard to the original understanding.

Relatedly, some scholars argue that the IP Clause limits some of Congress’s other enumerated powers, most notably its Commerce Clause power. They reason that the IP Clause grants a more specific power than that provided by the Commerce Clause, and the more specific ought to take precedence over the more general.⁴³ This reasoning, however, does not provide sufficient evidence that the IP

40. See U.S. CONST. art. I, § 8, cl. 12 (authorizing Congress “To raise and support Armies,” provided that “no Appropriation of Money to that Use shall be for a longer Term than two Years”); *id.* art. I, § 8, cl. 4 (granting Congress power “To establish an uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States”); see also Patry, *supra* note 17, at 373 (“Claiming that [Clauses 4, 8, and 12] do not act as a limitation on Congress’s power ignores their unambiguous text and repeated Supreme Court opinions holding that Clause 8 is both a grant of power to Congress and a limitation on that power.”).

41. See David P. Currie, *The Constitution in Congress: Substantive Issues in the First Congress, 1789–1791*, 61 U. CHI. L. REV. 775, 860 (1994) (“But the man who dominated constitutional debate in the first House of Representatives was the man who had dominated the Constitutional Convention itself, James Madison.”).

42. Cf. Paul M. Schwartz & William Michael Treanor, Eldred and Lochner: *Copyright Term Extension and Intellectual Property as Constitutional Property*, 112 YALE L.J. 2331, 2381 (2003) (“This constrained view of the enumerated powers would, again, suggest that for Madison, the Copyright Clause was a grant of power that Congress would not have possessed but for that grant.”).

43. E.g., Dreyfuss, *supra* note 15, at 230; Robert Patrick Merges & Glenn Harlan Reynolds, *The Proper Scope of the Copyright and Patent Power*, 37 HARV. J. ON LEGIS. 45, 63 (2000); Aaron K. Perzanowski, *The Penumbra Public Domain: Constitutional Limits on Quasi-Copyright Legislation*, 10 U. PA. J. CONST. L. 1081, 1100–03 (2008); Pollack, *supra* note 15, at 60; Joseph C. Merschman, Note, *Anchoring Copyright Laws in the Copyright Clause: Halting the Commerce Clause End Run Around Limits on Congress’s Copyright Power*, 34 CONN. L. REV. 661, 664 (2002).

Clause externally limits Congress's other powers. With respect to its interstate restriction, the Commerce Clause is a more specific power than the IP Clause. Applying the general-versus-specific reasoning to that fact, however, would lead to the incorrect conclusion that Congress is prohibited from using the IP Clause to regulate purely intrastate commerce, on the ground that such regulation would evade the Commerce Clause's restriction on regulating commerce that is interstate, a restriction that is absent from the IP Clause.⁴⁴

By contrast, others considering the general issue of overlap among Article I, Section 8 powers tend to conclude that the enumerated powers can and do overlap. Professor Nachbar observes that these powers currently overlap, given the broad contemporary reach of the Commerce Clause, even if less overlap existed in earlier times:

If one compares Section 8 as it was applied in 1789 with Section 8 as it is applied today, any number of its provisions have become superfluous. Certainly Congress could establish post offices and post roads today under either the commerce or spending powers, enact bankruptcy and naturalization statutes, fix standards for weights and measures, and criminalize counterfeiting of U.S. currency under the interstate commerce power, or even punish felonies on the high seas under the foreign commerce power. There is no reason to think that any of these powers were considered superfluous at the time, but they have become so. The growth of the commerce power means that we have to get comfortable with redundancy in Section 8.⁴⁵

Professor Jack Balkin similarly reasons that the enumerated powers are listed together, perhaps redundantly, in support of a larger principle authorizing Congress to act when the states are incompetent to do so individually.⁴⁶

This possibility of overlap, however, does not mean that Congress can use its other powers to reach beyond what seem to be limitations in the IP Clause. In fact, the opposite would seem to be

44. See Nachbar, *supra* note 12, at 313 ("That one of the Section 8 limitations must be read externally does not, as a matter of *logic*, dictate that they all must be; to so infer would lead to impossible results. . . . [Applying this rule] would prevent federal regulation of purely intrastate commercial conduct (such as sales or distribution) involving intellectual property because to allow such regulation would be to 'eradicate from the Constitution a limitation on the power of Congress to' regulate commerce." (footnotes omitted) (quoting *Ry. Labor Executives' Ass'n v. Gibbons*, 455 U.S. 457, 468–69 (1982))).

45. *Id.* at 350 (footnotes omitted).

46. Jack M. Balkin, *Commerce*, 109 MICH. L. REV. 1, 12 (2010).

true, textually and structurally. The reasoning embraced by Professor Nachbar and Professor Balkin does not seem to imply that Congress can inevitably do under one power what it is limited from doing under another; rather, it implies merely that an overlap of powers is not in itself forbidden. A careful reading of the text suggests that the IP Clause authorizes only the specified means to promote the progress of science and useful arts. As such, if Congress were permitted to use another power to implement other means to promote this progress, then the Clause's means-end structure would be read out of the Constitution's restrictions. Thus, a textual case exists for reading the Clause's internal limitations as limiting Congress's other powers. As discussed in later Sections, the Supreme Court has reasoned analogously in the context of Congress's bankruptcy powers.⁴⁷ Thus, the possibility of two different constitutional powers both conferring authority on Congress to take a particular action, as Professors Nachbar and Balkin discuss, is materially distinct from a situation in which one constitutional power seems to authorize action while the other seems to restrict or forbid it.

Professor Nachbar nonetheless emphasizes that each of the Article I, Section 8 powers has express limits. He elaborates:

Along with offenses against the law of nations, the tenth clause permits Congress to "define and punish Piracies and Felonies," but that power is expressly limited to felonies "committed on the high Seas." Does that mean that Congress cannot punish landlubbers' felonies pursuant to its commerce power? The Commerce Clause itself contains limitations, permitting the regulation of only foreign commerce, Indian commerce, or commerce "among the several States"⁴⁸

Nachbar goes on to suggest that the internal limitations on one power ought not necessarily be construed to limit other powers without evidence that the limitations were meant to reach beyond the power itself.⁴⁹ Nachbar reasons that limitations on a grant of one power are all too easily converted into a general lack of power to legislate in other areas.⁵⁰ Without any clear signal to make such a conversion, he

47. See *infra* text accompanying notes 154–62.

48. Nachbar, *supra* note 12, at 295 (footnote omitted) (quoting U.S. CONST. art. I, § 8, cls. 3, 10).

49. *Id.*

50. *Id.*

continues, one should not export the IP Clause's internal limitations to other enumerated powers.⁵¹

Professor Nachbar's argument falls short. Unlike the various clauses that Nachbar cites as examples to reinforce his argument, the unique means-end structure of the IP Clause provides a textual signal that Congress may not use its other powers to serve the goals of the IP Clause.⁵² Moreover, as I elaborate in subsequent Sections, early American history, judicial doctrine, and policy together loudly reinforce this signal.

Some argue that notwithstanding the unique phrasal structure of the IP Clause, which suggests limitations on Congress's power, the broader structure of Article I indicates otherwise. They reason that Section 8 contains grants of congressional legislative power, whereas Section 9 contains limitations.⁵³ On this reasoning, Congress may invoke any power that is granted by at least one clause in Section 8 and is not thereafter limited in Section 9.⁵⁴ Thus, given that Section 9 does not limit Congress's authority to promote the progress of science and useful arts, Congress might use means authorized in powers outside of the IP Clause to do so. Former Professor William Patry rejects this argument on the basis that "the limitations in Article I, Section 9 are not closely related to the grants of power in Section 8; instead, they involve different issues, specialized issues that may or may not relate to Section 8, or issues that are general in nature."⁵⁵ Under this line of reasoning, to use Section 9 to reject the possibility that the IP Clause limits Congress's other powers seems unreasonable.

In sum, ample textual and inferential evidence suggests that the IP Clause on its own permits only its specified means to achieve its designated end. The evidence from Article I's broader structure, however, is less conclusive. All in all, the IP Clause's text and the constitutional structure volunteer a suggestive—but not ironclad—argument that the Clause's unique construction operates externally to forbid Congress from using its other powers to promote the progress of science and useful arts beyond the means specified in the Clause. I

51. *Id.* at 296, 317.

52. *See supra* text accompanying notes 32–40.

53. *See* Patry, *supra* note 17, at 371 (presenting, although not accepting, this argument).

54. *Cf. id.*

55. *Id.* at 373 (footnotes omitted).

turn now to historical evidence that this understanding is the correct one.

B. History

This Section discusses the IP Clause's adoption at the Constitutional Convention along with early congressional activity construing the Clause and its structural relationship to other enumerated powers. This evidence demonstrates that the IP Clause was intended to restrain Congress from using its other powers to employ means other than those in the IP Clause to promote the progress of science and useful arts.

1. *Constitutional Convention.* During the period in which the states lived under the Articles of Confederation, the infeasibility of states' varying intellectual-property laws became increasingly clear. Three primary reasons contributed to this reality: First, different states would assign rights in the same or similar creations to different creators, or they would assign rights to the same person for the same creation for differing terms.⁵⁶ Most famously, the steamboat patent was assigned in some states to John Fitch and in others to James Rumsey.⁵⁷ These inconsistencies were both inefficient and confusing. Second, the protection of a creation in a single state was ineffective at preventing unauthorized copies of the creation in other states.⁵⁸ Finally, for the same creator to apply in each state to secure effective nationwide protection was uneconomical.⁵⁹ James Madison voiced concern about the lack of uniformity in copyright laws just before the Constitutional Convention.⁶⁰

Thus, one should not be surprised that proposals giving the federal government power to create intellectual-property laws arose at the Convention. Eight such proposals were presented on August 18, 1787, almost three months into the Convention, after the Committee of Detail had already written a first draft of the

56. BRUCE W. BUGBEE, GENESIS OF AMERICAN PATENT AND COPYRIGHT LAW 95–100 (1967).

57. *Id.* at 95–98.

58. *See id.* at 90 (“A single state patent could not hinder imitation in other states, of course, except in those cases where an offending device or its products entered the territory of the state granting the patent.”).

59. *Id.* at 88.

60. *Id.* at 125.

Constitution.⁶¹ James Madison made four proposals: First, in the realm of patents, Madison suggested a provision allowing Congress “To secure to the inventors of useful machines and implements the benefits thereof for a limited time.” Second, as to copyrights, he advocated language that would empower Congress “To secure to literary authors their copyrights for a limited time.” Third, in the area of education, he proposed a clause allowing Congress “To establish an University.” And fourth, he imagined a clause authorizing the creation of a system of grants and prizes under which Congress would be permitted “To encourage, by proper præmiums and provisions, the advancement of useful knowledge and discoveries.”⁶² Charles Pinckney of South Carolina proposed four similar provisions that would have allowed Congress to act in the same areas envisioned by Madison. Pinckney’s suggested language would have authorized Congress “To grant patents for useful inventions”; “To secure to Authors exclusive rights for a . . . certain time”; “To establish seminaries for the promotion of literature and the arts & sciences”; and “To establish public institutions, rewards and immunities for the promotion of agriculture, commerce, trades and manufactures.”⁶³ Not only were these similar proposals by Madison and Pinckney made on the same day,⁶⁴ suggesting some coordination, but in each case, the four proposals were also made together, signifying a similarity of subject matter.

Madison’s and Pinckney’s proposals were referred to the Committee of Detail, and by the end of August, they had been passed on to the third Committee of Eleven.⁶⁵ On September 5, 1787, the third Committee of Eleven recommended—without any recorded debate—the inclusion of an IP Clause in the Constitution that would provide Congress with power “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and

61. Oliar, *supra* note 1, at 1788–89.

62. 3 DOCUMENTARY HISTORY OF THE CONSTITUTION OF THE UNITED STATES OF AMERICA 554–55 (1900); *see also* 1 *id.* at 130–31. Although some scholars doubt that Madison proposed a patent power, Professor Dotan Oliar provides evidence that he did. Oliar, *supra* note 14, at 435–46 (“[T]he most reasonable inference . . . is that Madison proposed that Congress should have a patent power.”).

63. 3 DOCUMENTARY HISTORY OF THE CONSTITUTION, *supra* note 62, at 554–56; *see also* 1 *id.* at 130–31 (internal quotation marks omitted).

64. 3 *id.* at 554–55.

65. 2 THE RECORDS OF THE FEDERAL CONVENTION OF 1787, at 473 (Max Farrand ed., 1911).

Discoveries.”⁶⁶ On September 14, 1787, Madison and Pinckney together made a final attempt at the inclusion of a congressional power to establish a university,⁶⁷ apparently having given up on grants and prizes. After rejecting this motion,⁶⁸ the Convention approved the IP Clause on September 17, 1787, again without recorded debate.⁶⁹ The negligible discussion of the IP Clause in the Federalist Papers sheds little further light on the Clause.⁷⁰

Despite the near-silent treatment given to the IP Clause in the Convention’s records,⁷¹ in reworking the eight proposals into their final form, the Framers made a number of choices that strongly suggest the IP Clause’s intended meaning. For one thing, the IP Clause, as ultimately adopted, is more limited than plenary copyright and patent powers would have been.⁷² Rather than granting a blanket power to Congress to enact copyright and patent laws, as Madison and Pinckney had each originally proposed, the Framers prefaced the Clause’s operative provision with “To promote the Progress of Science and useful Arts, by.” The inclusion of such prefatory language indicates that the Framers meant for the Clause to achieve something other than merely granting to Congress power to enact copyright and patent laws. As Section A’s textual and structural reading of the text argues, the IP Clause’s preface seems to be a limitation.⁷³ Similarly, had the Clause simply given the power “to promote the Progress of Science and useful Arts,” Congress presumably would have had the power to enact legislation encompassing all eight of Madison’s and Pinckney’s proposals and then some.⁷⁴ The actual text and structure emphasize that the IP

66. *Id.* at 505.

67. *Id.* at 616.

68. *Id.*

69. BUGBEE, *supra* note 56, at 129.

70. See THE FEDERALIST NO. 43, at 271–72 (James Madison) (Clinton Rossiter ed., 1961) (addressing the common-law status of works of authorship and inventions and the utility of granting the federal government—rather than the states—the power to enact copyright and patent laws).

71. See Schwartz & Treanor, *supra* note 42, at 2375–76 (“The most relevant historical evidence directly bearing on the original understanding of the Copyright Clause can be summarized rapidly. There is little evidence from the Constitutional Convention.”).

72. Walterscheid, *To Promote*, *supra* note 12, at 80.

73. See Oliar, *supra* note 1, at 1776–77 (providing “three indications that the Framers intended the Progress Clause as a limitation on Congress’s intellectual property power”).

74. See *id.* at 1777 (“The Framers . . . took the limiting language from the rejected proposals and tacked it onto Madison and Pinckney’s plenary intellectual property proposals before allowing them into the Constitution.”).

Clause is more limited than it would have been if it had consisted of either the prefatory language or the operative language by itself. Congress is granted authority to promote the progress of science and useful arts, but only in a limited sense: by securing for limited times to authors and inventors exclusive rights in their writings and discoveries.⁷⁵

Moreover, the first part of the IP Clause, which concerns promoting progress, is derived from Madison's and Pinckney's other proposals related to intellectual property—namely, those to allow Congress to establish universities and to provide grants or prizes for innovation.⁷⁶ The Constitution's final version did not expressly adopt these proposals.⁷⁷ Professor Oliar primarily uses this observation to conclude that the IP Clause ought to be understood as granting Congress power to enact copyright and patent laws only if those laws promote the progress of science and useful arts.⁷⁸ But the more straightforward understanding strongly suggests the converse, a possibility that Oliar secondarily recognizes:⁷⁹ if Congress wants to promote the progress of science and useful arts, it can do so only by securing to authors and inventors exclusive rights in their writings and discoveries for limited times. The Framers rejected multiple other ways to promote the progress of science and useful arts—via universities or governmental grants and prizes, for example—yet kept the language about promoting progress that had originally been associated with those proposals. The Framers therefore appear to have sought to limit the ways in which Congress can promote the progress of science and useful arts—and in particular, to limit Congress to the means specified in the IP Clause itself.⁸⁰

Exactly why the rejected proposals were cast aside was the subject of only minimal discussion. Roger Sherman of Connecticut explained that there was no need to give the university power to the federal government, as the states could sufficiently establish universities instead.⁸¹ Gouverneur Morris of Pennsylvania observed that despite the elimination of this university power, the federal

75. *See supra* Part I.A.

76. Oliar, *supra* note 1, at 1777.

77. *Id.* at 1776–77.

78. *Id.* at 1777, 1811.

79. *Id.* at 1817.

80. *Id.* at 1791–92.

81. 3 THE RECORDS OF THE FEDERAL CONVENTION OF 1787, *supra* note 65, at 362.

government would nonetheless have a limited ability to create a university at the federal seat of government, an area over which the government would have exclusive control.⁸² As for the rejected power to award grants and prizes, some contemporaneous evidence suggests that the Constitution did not include this power because it would have been more expensive for a cash-poor federal government to implement than a system of awarding copyrights and patents would have been.⁸³ This reason appears to have been grounded in a rejection on the merits rather than a judgment that the federal government would otherwise fully possess this power under alternative provisions.⁸⁴

Scholars offer conflicting accounts of the Framers' views on monopolies and of how those views ought to shade a modern audience's understanding of the IP Clause. To the extent that the Framers were concerned about monopolies, one might see even more reason to conclude that the IP Clause's carefully calibrated means of promoting the progress of science and useful arts ought to be the only means of doing so, for fear that pursuing alternative legislative strategies might lead too far toward monopolization. Some commentators emphasize that the Framers—prominently George Mason—and Thomas Jefferson feared monopolies and sought to approve of monopolies only narrowly by granting limited rights in

82. 2 *id.* at 616.

83. Walterscheid, *To Promote*, *supra* note 12, at 6 n.21. Scholars offer other theories for this decision, such as a desire to limit monopolistic tendencies, a fear of Congress's favoritism toward particular individuals or states, and a desire to minimize the government's role in the marketplace. *E.g.*, Oliar, *supra* note 1, at 1800–02.

84. The means authorized by the IP Clause indicate how Article I, Section 8 more broadly focuses on solving problems of collective action among the states by placing power in those areas in the hands of Congress. *See generally* Balkin, *supra* note 46 (discussing this theory with regard to Article I, Section 8 generally); Robert D. Cooter & Neil S. Siegel, *Collective Action Federalism: A General Theory of Article I, Section 8*, 63 STAN. L. REV. 115 (2010) (same). Many collective-action problems were associated with the preconstitutional implementation of copyright and patent laws by states. *See supra* text accompanying notes 56–60. By giving Congress power to enact copyright and patent laws, the Constitution mitigated these problems. Relatedly, this theory of collective action explains the intellectual-property powers that the Framers rejected: education and grants and prizes. Neither of these powers would have implicated any significant collective-action concerns, as the states could have implemented both of the contemplated schemes without encountering any unusually worrisome negative externalities. This insight does not mean that Congress's powers extend only to problems of collective action or to every problem of collective action, but rather that the Framers were convinced that some such problems had to be fixed by Congress.

intellectual property.⁸⁵ In support of their views, these scholars point to earlier English copyright and patent laws enacted to curb monopolies.⁸⁶

Others suggest that the Framers had inconsistent and complex views on monopolies.⁸⁷ For one thing, the Framers did not include a constitutional provision that would have forbidden monopolies altogether.⁸⁸ For another, George Mason and others with asserted antimonopoly views were, according to Professors Paul Schwartz and Dean William Treanor, “concerned with what they feared would be a broad implied congressional power under the Necessary and Proper Clause, rather than the express power to authorize patents and copyrights.”⁸⁹ Some Framers may have even thought monopolies were good in various circumstances.⁹⁰ This group of scholars thus suggests that antimonopolistic concerns ought not to be relied upon in construing the IP Clause.⁹¹ They deemphasize the importance of Thomas Jefferson’s views in this context, not least because he did not participate in the Constitutional Convention.⁹²

As Professor Nachbar points out, even the antimonopolistic views of some of the Framers would not, on their own, establish that the IP Clause was meant to place affirmative limits on other federal powers. Nachbar comments that “those who would apply the Intellectual Property Clause’s limits to all of Article I must identify a

85. *E.g.*, BOYLE, *supra* note 19, at 20–28, 170; Heald & Sherry, *supra* note 18, at 1143–60; Tyler T. Ochoa & Mark Rose, *The Anti-Monopoly Origins of the Patent and Copyright Clause*, 84 J. PAT. & TRADEMARK OFF. SOC’Y 909, 925–28 (2002); Walterscheid, *IP Clause*, *supra* note 12, at 769–70.

86. *E.g.*, Ochoa & Rose, *supra* note 85, at 912–16.

87. *See, e.g.*, Nachbar, *supra* note 12, at 329–45 (arguing that James Madison disfavored monopolies but did not consider them to be enough of a problem to justify a restriction on representative government); Schwartz & Treanor, *supra* note 42, at 2334 (arguing that the Founders were not uniformly “deeply fearful of . . . monopolies” and pointing to a “range of views among the Founders about monopolies”).

88. Nachbar, *supra* note 12, at 329–45.

89. Schwartz & Treanor, *supra* note 42, at 2378.

90. *See, e.g., id.* at 2383–84 (“The Federalists, in general, believed monopolies could advance the commonweal.”).

91. *See, e.g.*, Nachbar, *supra* note 12, at 349 (“[T]he granting of monopolies was not deemed to be a power different enough in kind or degree from other powers to be worthy of limits beyond those inherent in representative government.”).

92. *E.g.*, Schwartz & Treanor, *supra* note 42, at 2378. Jefferson did, however, see a draft of the Constitution that contained the IP Clause, sent to him by Madison. Walterscheid, *IP Clause*, *supra* note 12, at 769. Jefferson did not mention the IP Clause when he responded to Madison, but he urged the inclusion of a bill of rights, among whose provisions would be certain restrictions on monopolies. *Id.*

link between that general distaste and the need to constrain government from having the power, a link never made by the Framers.”⁹³ At most, then, the existence of antimonopolistic views among the Framers provides mere shading to supplement the other historical evidence on the IP Clause.

The Framers’ views on monopolies may have ambiguous implications for various federal powers. Nonetheless, James Madison’s writing on the topic is useful for shedding light on the reach of the IP Clause:

Monopolies tho’ in certain cases useful ought to be granted with caution, and guarded with strictness ag[ain]st abuse. The Constitution of the U.S. has limited them to two cases, the authors of Books, and of useful inventions, in both which they are considered as a compensation for a benefit actually gained to the community as a purchase of property which the owner might otherwise with[h]old from public use. There can be no just objection to a temporary monopoly in these cases: but it ought to be temporary, because under that limitation a sufficient recompence and encouragement may be given.⁹⁴

Madison’s discussion provides evidence that whatever the Framers’ overall views on monopolies, Madison himself thought that Congress would be unable to grant monopolistic rights in intellectual property other than via the means provided in the IP Clause. Although Professor Nachbar agrees that this interpretation is facially plausible, he writes that a viable alternative account would be that Madison thought that no other enumerated power gave Congress the power to grant exclusive rights.⁹⁵ But as discussed in the next Section, a more complete look at Madison’s views demonstrates overwhelmingly that Madison thought the only way for Congress to grant exclusive rights would be through the means provided in the IP Clause. To cite one pertinent example, Madison likely believed that the exclusive rights that would be provided by a particular legislative proposal for patents of importation were within the reach of the Commerce Clause but were otherwise restricted by the IP Clause.⁹⁶ Therefore, the possibility

93. Nachbar, *supra* note 12, at 345 (emphasis omitted).

94. James Madison, Monopolies. Perpetuities. Corporations. Ecclesiastical Endowments., reprinted in Madison’s “Detached Memoranda,” 3 WM. & MARY Q. 534, 551 (Elizabeth Fleet ed., 1946).

95. Nachbar, *supra* note 12, at 346–47, 349.

96. See *infra* text accompanying notes 99–109.

that Madison did not see exclusive rights of any kind as falling within any of Congress's other powers is unlikely.

All in all, the history that culminated in the IP Clause's adoption suggests that the Clause ought to be understood as granting Congress power to promote the progress of science and useful arts, but only by employing copyright and patent protection as limited by the Clause's specified means. The Framers rejected other possible means of promoting the progress of science and useful arts, and their rejection seems to have been a judgment on the merits that those means would be unwise. Moreover, the Clause ultimately retained purposive, ends-oriented language similar to that contained in the rejected powers—"To promote the Progress of Science and useful Arts." The inclusion of such language underscores that the IP Clause's ends should not be effectuated by means other than the adopted ones.

This discussion would seem strongly to establish the IP Clause's internal limits, but what of the ability of Congress to invoke its other powers to use alternative means, including the rejected means? The same history seems strongly to support the inference that the Framers intended Congress to possess no means to promote the progress of science and useful arts other than those adopted in the IP Clause. And even stronger evidence, taken from the earliest congressional activity, encourages the drawing of this inference. I turn now to that evidence.

2. *Early Congressional Activity.* Evidence from the Constitutional Convention is not the only history helpful for understanding the IP Clause. As the Supreme Court emphasized in construing the Clause in a 2003 decision, constitutional construction can be aided by looking to "a contemporaneous legislative exposition of the Constitution when the founders of our Government and framers of our Constitution were actively participating in public affairs."⁹⁷ Early congressional activity can thus shed light on how the Framers understood the IP Clause itself and its connection with the other congressional powers.⁹⁸ This evidence demonstrates that the Framers understood the IP Clause to operate externally to forbid

97. *Eldred v. Ashcroft*, 537 U.S. 186, 213 (2003) (quoting *Myers v. United States*, 272 U.S. 52, 175 (1926)).

98. See Currie, *supra* note 41, at 777 (noting that "the first Congress was a sort of continuing constitutional convention," in part "because so many of its members . . . had helped to compose or to ratify the Constitution itself").

Congress from using its other powers to employ means of promoting the progress of science and useful arts not specified in the IP Clause.

A critical piece of evidence supporting the IP Clause's external limitations concerns patents of importation, exclusive rights for limited times to the first person to import foreign technologies not previously known or in use in the United States. Although a draft of the Patent Act of 1790 provided for patents of importation,⁹⁹ the final version of the law that Congress passed during its first session did not authorize them.¹⁰⁰ The provision was removed on March 5, 1790, after debate in the House of Representatives.¹⁰¹ Representative Thomas Fitzsimons explained that it had been removed because of "the Constitutional power being Questionable."¹⁰² Correspondence reveals that James Madison—and possibly others—doubted the constitutionality of patents of importation. Tench Coxe, the assistant secretary of the treasury and a strong supporter of patents of importation as a means of encouraging American manufactures, wrote in a letter a few weeks later to Madison:

I saw with regret the truth of [Madison's] apprehension, that the benefit of a patent could not be constitutionally extended to imported objects—nor indeed, if it were within the verge of the powers of Congress, do I think any clause to that effect could be safely modified. Private acts would be wise and safe, if they could be thought constitutional; but I think they cannot without an Amendment, by striking out all of the clause that follows the word "by" in the 8th parag. of the 8th Sec. of the first Article—or something to that purpose.¹⁰³

Coxe's letter makes evident that Madison did not believe that Congress could constitutionally provide for patents of importation because these patents seemed to lie outside of the means specified in the IP Clause, which allows patent rights to be conferred on

99. H.R. 41, 1st Cong. § 6 (1790), *reprinted in* 6 DOCUMENTARY HISTORY OF THE FIRST FEDERAL CONGRESS OF THE UNITED STATES OF AMERICA 1626, 1631 (Charlene Bangs Bickford & Helen E. Veit eds., 1986).

100. *See* Act of Apr. 10, 1790, ch. 7, 1 Stat. 109 (repealed 1793).

101. Edward C. Walterscheid, *Patents and Manufacturing in the Early Republic*, 80 J. PAT. & TRADEMARK OFF. SOC'Y 855, 873–74 (1998) (citing Letter from Thomas Fitzsimons to Tench Coxe (Mar. 5, 1790)).

102. *Id.* (quoting Letter from Thomas Fitzsimons to Tench Coxe, *supra* note 101).

103. Letter from Tench Coxe to James Madison (Mar. 21, 1790), *reprinted in* 13 THE PAPERS OF JAMES MADISON: CONGRESSIONAL SERIES 111, 113 (Charles F. Hobson et al. eds., 1981) (footnote omitted).

inventors, not on importers of already-created inventions. For this reason, Coxe specified that the only constitutional way to legislate patents of importation would be to remove the means limitation specified in the IP Clause, thereby allowing the promotion of the progress of science and useful arts by any means, including through patents of importation.¹⁰⁴ A subsequent draft¹⁰⁵ of what became the 1791 *Report on the Subject of Manufactures*¹⁰⁶ by Alexander Hamilton also expressed doubt over the constitutionality of patents of importation.¹⁰⁷

This evidence has consequences for both the IP Clause's scope and its relationship to the other enumerated powers. As to the former, James Madison and others fairly clearly believed that Congress could not rely on the IP Clause to implement any means of promoting the progress of science and useful arts beyond the means specified in the Clause. Patents of importation represented one example of such impermissible means.

What has gone unobserved, however, is that this evidence also shows that Madison—and apparently others in the First Congress—believed that Congress could not invoke any of its other enumerated powers to enact means of promoting the progress of science and useful arts. But for the IP Clause, Congress would likely have had the authority to provide for patents of importation pursuant to the Commerce Clause. Even under the more limited understanding of the Commerce Clause at that early juncture in American history,¹⁰⁸ the foreign-commerce powers would have authorized provisions for patents of importation, as those kinds of provisions would have regulated items of trade being imported from foreign countries into

104. *Id.*

105. Alexander Hamilton, First Draft of the Report on the Subject of Manufactures (1790), reprinted in 10 THE PAPERS OF ALEXANDER HAMILTON 23 (Harold C. Syrett et al. eds., 1966).

106. Alexander Hamilton, Final Version of the Report on the Subject of Manufactures (1791), reprinted in 10 THE PAPERS OF ALEXANDER HAMILTON, *supra* note 105, at 230.

107. Hamilton, *supra* note 105, at 37; see also Walterscheid, *supra* note 101, at 865–66 (discussing the development of Hamilton's thoughts regarding patents of importation).

108. See *Gonzales v. Raich*, 545 U.S. 1, 15–16 (2005) (“For the first century of our history, the primary use of the [Commerce] Clause was to preclude the kind of discriminatory state legislation that had once been permissible.”); Richard A. Epstein, *The Proper Scope of the Commerce Power*, 73 VA. L. REV. 1387, 1389 (1987) (arguing that Alexander Hamilton's understanding of the word “commerce” was “restrictive by modern standards”). But see Balkin, *supra* note 46, at 5 (arguing that the commerce power was understood broadly during the eighteenth century).

the United States.¹⁰⁹ That Madison and likely others thought that Congress could not establish patents of importation under the Commerce Clause strongly indicates that they thought that the IP Clause externally limited Congress's ability to promote the progress of science and useful arts by any means other than those laid out in the IP Clause itself.

The same conclusion can be drawn from Madison's views on granting land to encourage the importation of inventions. In his series of letters with Coxe following the excision of the provision concerning patents of importation from what became the first federal patent law, Coxe advocated that Congress "appropriat[e] a district of territory to the encouragement of imported inventions" if patents of importation could not directly be allowed.¹¹⁰ Madison replied with skepticism as to the constitutionality of such land grants. He stated explicitly that Congress's powers of encouraging invention are limited to the means specified in the IP Clause, thus excluding the possibility of land grants:

I can not but apprehend . . . that the clause in the constitution which forbids patents for [importation] will lie equally in the way of your expedient. Congress seem[s] to be tied down to the single mode of encouraging inventions by granting the exclusive benefit of them for a limited time, and therefore to have no more power to give a further encouragement out of a fund of land than a fund of money. This fetter on the National Legislature tho' an unfortunate one, was a deliberate one. The Latitude of authority now wished for was strongly urged and expressly rejected.¹¹¹

109. See e.g., *United States v. Lopez*, 514 U.S. 549, 585 (1995) (Thomas, J., concurring) ("At the time the original Constitution was ratified, 'commerce' consisted of selling, buying, and bartering, as well as transporting for these purposes."); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 189–90, 196–97 (1824) (finding that "commerce" includes "the commercial intercourse between nations"); Anthony J. Colangelo, *The Foreign Commerce Clause*, 96 VA. L. REV. 949, 962 (2010) (arguing that Congress's foreign-commerce power is robust because historically there has been an "overriding concern that the federal government speak with one voice when regulating foreign commerce"); Epstein, *supra* note 108, at 1394–95 (discussing the importance and purpose of the foreign-commerce power). The Supreme Court has noted that "[a]lthough the Constitution, [Article I, Section 8, Clause 3], grants Congress power to regulate commerce 'with foreign Nations' and 'among the several States' in parallel phrases, there is evidence that the Founders intended the scope of the foreign commerce power to be the greater." *Japan Line, Ltd. v. County of Los Angeles*, 441 U.S. 434, 448 (1979).

110. Letter from James Madison to Tench Coxe (Mar. 28, 1790), *reprinted in* 13 THE PAPERS OF JAMES MADISON, *supra* note 103, at 128, 128.

111. *Id.* Madison later stated in his first presidential inaugural address that he would use "authorized means" to promote technological progress, implying that some means of promoting

As much as this letter emphasizes Madison's view that the IP Clause permits Congress only its specified means to promote the progress of science and useful arts, it also indicates that Congress cannot use means otherwise within its enumerated powers to promote the progress of science and useful arts. Madison doubted Congress's power to grant federal land in exchange for importing technologies from other countries, despite the existence of the constitutional power granted to Congress in Article IV, Section 3 "to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States."¹¹²

Further evidence buttresses this understanding of the IP Clause's external limitation of Congress's other powers. In his first annual message to Congress in 1790, President Washington invoked the goal of "promot[ing] . . . science and literature" and asked the first Congress to create a national university.¹¹³ Congress subsequently debated the issue. Prominent among the arguments made against a national university was that Congress had no power to create one. Roger Sherman noted that the Constitutional Convention had rejected giving Congress the power to create a university, thereby leaving this power to the states instead.¹¹⁴ Similarly, Representative Michael Stone of Maryland and others stated that the Constitution did not authorize Congress to create a university.¹¹⁵ These positions

progress are unavailable to the federal government. James Madison, First Inaugural Address (Mar. 4, 1809), in 8 THE WRITINGS OF JAMES MADISON 47, 49 (Gaillard Hunt ed., 1908).

112. U.S. CONST. art. IV, § 3, cl. 2. Notably, many years later, in 1862, Congress employed this power in the Morrill Act, ch. 130, 12 Stat. 503 (1862), to give states federal land to establish colleges and universities, *id.* Some argued against the law's passage based on the IP Clause's external limitations. John H. Florer, *Major Issues in the Congressional Debate of the Morrill Act of 1862*, 8 HIST. EDUC. Q. 459, 463–65 (1968). In addition to occurring much later in the nation's history, this action was arguably consistent with Congress's earlier rejection of the university power: it was undertaken to provide states with land so that they might exercise their constitutionally acceptable authority to create universities.

113. George Washington, First Annual Address (Jan. 8, 1790), reprinted in 1 A COMPILATION OF THE MESSAGES AND PAPERS OF THE PRESIDENTS, *supra* note 30, at 65, 66.

114. 2 ANNALS OF CONG. 1551 (1790).

115. *Id.*; Gazette of the United States (May 5, 1790), reprinted in 13 DOCUMENTARY HISTORY OF THE FIRST FEDERAL CONGRESS, *supra* note 99, at 1220, 1221. In 1821, Congress created the Columbian College in the District of Columbia, *The Columbian College: Where It All Began*, GEO. WASH. UNIV., <http://columbian.gwu.edu/aboutus/history> (last visited Mar. 19, 2012), pursuant to its power "To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the acceptance of Congress, become the Seat of the Government of the United States," U.S. CONST. art. I, § 8, cl. 17. With regard to Washington, D.C., the seat of the U.S. government, Congress's powers resemble the powers reserved to the states and include those otherwise forbidden to

support the premise that the Constitutional Convention's rejection of a university power as a means of promoting the progress of science and useful arts precluded Congress from fulfilling President Washington's request.

Similar is the earliest Congress's view as to whether the federal government could fund artistic, scientific, and technological work, a means not specified in the IP Clause. In 1789, a man named John Churchman asked the House of Representatives to support his invention for determining longitude based on the magnetic variation at places of known latitude. Churchman asked Congress to help him in two ways: first, by awarding him exclusive rights in the invention; and second, by funding a voyage to Baffin Bay to help him further develop the invention.¹¹⁶ A congressional committee debated this request, readily concluding that Churchman ought to receive an exclusive right for a limited term in exchange for publishing his invention.¹¹⁷ Representative Thomas Tucker of South Carolina, however, questioned whether the IP Clause would allow the legislature "to go further in rewarding the inventors of useful machines, or discoveries in sciences, than merely to secure to them for a time the right of making, publishing and vending them."¹¹⁸ Similarly, Roger Sherman expressed doubt that Congress could comply with Churchman's request for funding:

[Our grant of an exclusive right to him] appears gone as far as proper to go at this time, as far as warranted by the Constitution. . . . If have a right to go further and lay out money it must be upon—Gentleman has fruitful invention. Large sums might be expended which finally might be to no advantage. The committee thought fit to go as far as this to promote the progress; they did not think proper to give any further power to encourage this useful discovery.¹¹⁹

Congress. Therefore, even if Congress is forbidden via the IP Clause from creating universities pursuant to its other enumerated powers, its power to do so pursuant to its plenary power over the District of Columbia seems to trump the IP Clause's external limitations. Cf. Eugene Kontorovich, *The Constitutionality of International Courts: The Forgotten Precedent of Slave-Trade Tribunals*, 158 U. PA. L. REV. 39, 51 (2009) (observing that "[t]he absolute nature of congressional control [over the District of Columbia] has suggested . . . that some other constitutional constraints do not apply").

116. 1 ANNALS OF CONG. 143 (1789) (Joseph Gales ed., 1834).

117. *Id.* at 170–71.

118. *Id.* at 173.

119. Lloyd's Notes (Apr. 20, 1789), reprinted in 10 DOCUMENTARY HISTORY OF THE FIRST FEDERAL CONGRESS, *supra* note 99, at 206, 213.

Other representatives questioned the power to fund as well.¹²⁰ The committee tabled the funding request given “the present deranged state of [the federal government’s] finances.”¹²¹ No resolution in hand, Churchman renewed his request for funding, and a congressional committee ultimately rejected it in 1791 because of the constitutional questions it raised, questions the committee did not want to explore.¹²² In 1796, a congressional committee stated this concern more pointedly: “[A]pplication to Congress for pecuniary encouragement of important discoveries, or of useful arts, cannot be complied with, as the Constitution of the United States appears to have limited the powers of Congress to granting patents only.”¹²³ Of all those who voiced an opinion on the matter, none appears to have thought that the means specified in the IP Clause might encompass the funding of artistic, scientific, and technological works.

This discussion is instructive when placed alongside another broader contemporaneous constitutional debate. At issue in that debate was whether the Spending Clause—authorizing Congress to “provide for the common Defence and general Welfare of the United States”¹²⁴—enables Congress to spend on things beyond what the enumerated powers otherwise permit. James Madison argued that because “the United States is a government of limited and enumerated powers, the grant of power to tax and spend for the general national welfare must be confined to the enumerated legislative fields committed to the Congress.”¹²⁵ Taking the opposite position, Alexander Hamilton contended that “the clause confers a power separate and distinct from [other enumerated powers] . . . [and is] limited only by the requirement that it shall be exercised to

120. For example, Representatives Joshua Seney, John Page, and Alexander White all questioned the government’s authority to fund the invention’s further development. *Id.* at 214–15.

121. H.R. JOURNAL, 1st Cong., 1st Sess. 18 (1789). Madison later vaguely spoke in favor of Churchman’s research efforts without discussing the funding request specifically. Lloyd’s Notes, *supra* note 119, at 211–12, 217–18.

122. H. COMM., 1ST CONG., REP. (1791), reprinted in 4 DOCUMENTARY HISTORY OF THE FIRST FEDERAL CONGRESS, *supra* note 99, at 530, 530–31.

123. H.R. DOC. NO. 4-74 (1796), reprinted in 1 AMERICAN STATE PAPERS: MISCELLANEOUS 140, 140 (Walter Lowrie & Walter S. Franklin eds., Wash, D.C., Gales & Seaton 1832); cf. Edward C. Walterscheid, *Conforming the General Welfare Clause and the Intellectual Property Clause*, 13 HARV. J.L. & TECH. 87, 99–100 (1999) (discussing similar early congressional doubts about the constitutionality of federal educational funding).

124. U.S. CONST. art. I, § 8, cl. 1.

125. *United States v. Butler*, 297 U.S. 1, 65 (1936).

provide for the general welfare of the United States.”¹²⁶ Whether the Spending Clause allowed spending on items not included in the enumerated powers—or in the specific context here, on items not permitted by the IP Clause’s means—was very much a live issue at the time.¹²⁷ In the context of Churchman’s funding request, however, the committee members thought that Congress likely lacked the authority to fund Churchman’s scientific research despite the Spending Clause.

In sum, the evidence from early congressional activity overwhelmingly suggests that the Framers believed that the IP Clause could be employed to promote the progress of science and useful arts only by using the means specified in that Clause and that Congress could not use its other enumerated powers to employ any other means.

C. *Judicial Doctrine*

The Supreme Court has not yet addressed the IP Clause’s external limitations directly. Nonetheless, its cases construing the IP Clause and constitutional structure generally are consistent with—and oftentimes are supportive of—an IP Clause that externally limits Congress’s other powers.

The Supreme Court has stated numerous times that the power conferred on Congress by the IP Clause is specifically a power “to promote the Progress of Science and useful Arts” and that the means to achieve that goal are specified in the latter part of the Clause.¹²⁸ The Supreme Court has also examined the reach of the IP Clause. But the Court’s discussions—frequently in dicta—have usually occurred in the context of determining the internal constraints of the IP Clause itself, not in the context of determining whether the IP Clause might impose affirmative limits on Congress’s other enumerated powers. For example, in a 1989 preemption case, the Supreme Court noted,

[T]he Clause contains both a grant of power and certain limitations upon the exercise of that power. Congress may not create patent

126. *Id.* at 65–66.

127. Not until 1936 did the Supreme Court definitively side with Hamilton on this issue, albeit not in the context of intellectual property. *See infra* Part II.B.2

128. *E.g.*, *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346, 349 (1991); *Goldstein v. California*, 412 U.S. 546, 555 (1973); *Great Atl. & Pac. Tea Co. v. Supermkt. Equip. Corp.*, 340 U.S. 147, 154 (1950) (Douglas, J., concurring); *Trade-Mark Cases*, 100 U.S. 82, 93 (1879).

monopolies of unlimited duration, nor may it “authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available.”¹²⁹

Similarly, the Court stated in an earlier case interpreting patent law’s nonobviousness requirement that “[t]he [IP] clause is both a grant of power and a limitation” and that “Congress in the exercise of the patent power may not overreach the restraints imposed by the stated constitutional purpose.”¹³⁰ Whether one ought to infer from these statements that the IP Clause limits Congress’s overall ability to regulate intellectual property outside of the means provided in the Clause is not entirely clear.

The IP Clause’s external limitations can be more readily inferred from the Supreme Court’s 1879 decision in the *Trade-Mark Cases*.¹³¹ In that case, the Court struck down as unconstitutional the first federal trademark law, which Congress had enacted pursuant to the IP Clause.¹³² The Court’s reasoning was muddled, but it suggested that the decision was resolved this way because trademark protection has nothing—at least proximately—to do with promoting the progress of science and useful arts. The Court indicated that the IP Clause designates the means that Congress may use—“by securing for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries”—to promote the progress of science and useful arts.¹³³ The Court observed that “[t]he ordinary trade-mark has no necessary relation to invention or discovery” and that a trademark should not be understood as a “writing[]” within the bounds of the IP Clause.¹³⁴ Because trademark law’s purpose is not to

129. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989) (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966)).

130. *Graham*, 383 U.S. at 5–6; see also *Great Atl. & Pac. Tea Co.*, 340 U.S. at 154 (Douglas, J., concurring) (finding that the IP Clause, “unlike most of the specific powers which Congress is given, . . . is qualified”).

131. *Trade-Mark Cases*, 100 U.S. 82 (1879).

132. *Id.* at 93–94.

133. *Id.* at 93.

134. *Id.* The Supreme Court subsequently made a similar point in interpreting the phrase “origin of goods” in the Lanham Act, ch. 540, 60 Stat. 427 (1946) (codified as amended in 15 U.S.C. §§ 1051–1127 (2006)), the federal implementation of the trademark laws. The Court concluded in *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003), that the rights conferred by the Lanham Act belong to “the producer of the tangible goods that are offered for sale” rather than “the author of any idea, concept, or communication embodied in

promote the progress of science and useful arts but rather to support fair competition and consumer protection,¹³⁵ trademark laws are not plausibly within the reach of the IP Clause. The Court, however, left open the possibility that Congress might permissibly enact a trademark law under the Commerce Clause instead.¹³⁶

This construction is consistent with—and supportive of—the notion of an IP Clause that externally limits Congress’s other powers. It suggests that if a law is not aimed at promoting the progress of science and useful arts, then Congress may not enact the law pursuant to the IP Clause and may enact the law only if it finds another enumerated power as a hook.¹³⁷ This reasoning constructs a channeling mechanism of sorts: laws concerned with the promotion of the progress of science and useful arts ought to be channeled into the purview of the IP Clause and must comply with its limiting means, and those that are not must be channeled elsewhere, into the purview of another enumerated power.¹³⁸ In the *Trade-Mark Cases*, the Court was called upon to deal with the latter situation. It has not, however, been called upon to address directly the former situation.

The Supreme Court’s discussion of the IP Clause in *Eldred v. Ashcroft*¹³⁹ in 2003 is also consistent with my understanding. In that case, the Court upheld the constitutionality of Congress’s 1998 copyright-term extension for existing works protected by copyright, a move that had the effect of placing those existing works on equal durational footing with new works that were also covered by the term

those goods.” *Id.* at 37. The Court rejected the latter, broader possible interpretation because it would “creat[e] a species of perpetual patent and copyright, which Congress may not do.” *Id.*

135. Jeanne C. Fromer, *The Role of Creativity in Trademark Law*, 86 NOTRE DAME L. REV. 1885, 1891 (2011) (“Trademark law came to emphasize protecting consumers from confusion to foster fair competition and to justify a more extensive right.”).

136. *Trade-Mark Cases*, 100 U.S. at 94–98 (questioning “whether trade-mark bears such a relation to commerce in general terms as to bring it within congressional control,” yet proposing that the Court leave the issue undecided in light of “the dictate of wisdom and judicial propriety”).

137. Other courts construing the *Trade-Mark Cases* have focused on the latter part of the IP Clause. *See, e.g.*, *United States v. Martignon*, 492 F.3d 140, 146 (2d Cir. 2007) (“[T]he Court [in the *Trademark Cases*] held that a criminal trademark statute was not authorized by the Copyright Clause because trademarks do not require originality.”).

138. That said, the Supreme Court has implied in an offhand dictum that the Commerce Clause might be invoked, in addition to the IP Clause, to regulate intellectual property. *See Goldstein v. California*, 412 U.S. 546, 559 (1973) (“Where the need for free and unrestricted distribution of a writing is thought to be required by the national interest, the Copyright Clause and the Commerce Clause would allow Congress to eschew all protection.”).

139. *Eldred v. Ashcroft*, 537 U.S. 186 (2003).

extension.¹⁴⁰ Relying on text, history, and precedent, the Court held that the “limited Times” for which Congress may grant copyright protection includes the practice of extending copyright protection for already-protected works from one limited time to another.¹⁴¹

More relevant for the purposes of this Article, however, is the tripartite framework the Supreme Court applied to evaluate the law’s constitutionality. First, the Court looked to the structure of the term-extension law to see if there was any “cause to suspect that a purpose to evade the ‘limited Times’ prescription [had] prompted Congress” to enact it.¹⁴² This analytical move suggests that future analysis might do well to look to an intellectual-property law’s structure and motivation to evince the law’s purpose. Second, although the Supreme Court accorded no deference to Congress in analyzing what “limited Times” means and whether the copyright law at issue truly did provide protection for only “limited Times,” the question of whether the law was a proper exercise of Congress’s power under the IP Clause was one the Supreme Court evaluated by measuring—with substantial deference to the legislature—whether the law was “a rational exercise of the legislative authority conferred by the [IP Clause].”¹⁴³ Third, the Court recognized, as it had in previous decisions,¹⁴⁴ that promotion of the progress of science and useful arts is the purpose for which Congress may enact intellectual-property legislation and that Congress may do so by using any of the means outlined in the Clause.¹⁴⁵

The combination of these three analytical components supports my understanding of the IP Clause. By invoking these components, the Court suggested that when Congress acts via legislation to promote the progress of science and useful arts, it must choose to do so by the means specified in the IP Clause. The Court will uphold any legislation that has the end of promoting the progress of science and useful arts as long as it secures exclusive rights to authors and inventors in their writings and discoveries for limited times. If legislation with this purpose lacks any of these qualities—(1) securing exclusive rights (2) to authors and inventors (3) for their writings and

140. *Id.* at 193–94.

141. *Id.* at 199–203.

142. *Id.* at 199–200.

143. *Id.* at 204–05.

144. *See supra* text accompanying notes 128–30.

145. *Eldred*, 537 U.S. at 211–12.

discoveries (4) for limited times—as these qualities have been defined by the courts, then the Court will strike down the law as unconstitutional.

This understanding refutes Justice Stevens’s claim in his *Eldred* dissent that the majority was reading the IP Clause “to provide essentially no limit on congressional action under the Clause.”¹⁴⁶ To the contrary, the majority indicated that when Congress seeks to promote the progress of science and useful arts, it must act within the Clause’s means—by providing rights only for “limited Times,” as construed by the Court, for example. The Court’s opinion suggests a substantial limit on congressional action, one the First Congress willingly imposed on itself with regard to patents of importation, land grants, research funding, and establishment of a national university.¹⁴⁷ It also suggests a significant restraint for modern times, one that I explore in questioning the constitutionality of multiple federal laws.

The Supreme Court has not said much more on limitations that the IP Clause imposes on other enumerated powers. Yet Court opinions in other constitutional areas shed light on the structural relationship between the IP Clause and other congressional powers, a relationship that supports the notion of an IP Clause that imposes external limitations on those powers.

In the landmark civil-rights case of *Heart of Atlanta Motel, Inc. v. United States*,¹⁴⁸ the Supreme Court upheld federal legislation banning racial discrimination in public accommodations.¹⁴⁹ The Court reasoned that the ban was a valid exercise of Congress’s commerce power, as it was “carefully limited to enterprises having a direct and substantial relation to the interstate flow of goods and people.”¹⁵⁰ The Court refused to accept the argument that the law should be struck down as outside the scope of Congress’s powers merely because the Civil War amendments had not expressly granted the power to enact the law.¹⁵¹ The Court reasoned that as long as the Commerce Clause

146. *Id.* at 230 (Stevens, J., dissenting); *see also id.* at 243 (Breyer, J., dissenting) (“The majority believes these conclusions rest upon practical judgments that at most suggest the statute is unwise, not that it is unconstitutional.”).

147. *See supra* Part I.B.2.

148. *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964).

149. *Id.* at 261–62.

150. *Id.* at 250–51.

151. *See id.* at 261–62 (upholding the ban as a valid exercise of congressional power under the Commerce Clause).

could be held to grant the power, the specific authority conferred by the amendments was irrelevant.¹⁵²

Some scholars read the *Trade-Mark Cases* and *Heart of Atlanta Motel* as permitting Congress to legislate under one power when another power is closed off. For example, Professor Nachbar states that these cases suggest that Congress can use its other Article I, Section 8 powers to legislate when the IP Clause's limitations bar it from acting under that power.¹⁵³

Professor Nachbar's reading, however, is unwarranted. In *Heart of Atlanta Motel*, no reason existed to support the implication that the Civil War amendments' failure to ban racial discrimination in public accommodations prevented Congress from using one of its enumerated powers to accomplish that goal. The Court perceived no basis to infer a conflict between those amendments and Congress's other powers. The situation is different in the context of the IP Clause. The history, text, and structure discussed in Sections A and B provide strong reasons to see just such a conflict between the IP Clause and Congress's other enumerated powers. The analogy to *Heart of Atlanta Motel*, therefore, is inapposite.

More on point is the Supreme Court's decision about the relationship between the Bankruptcy¹⁵⁴ and Commerce¹⁵⁵ Clauses in *Railway Labor Executives' Ass'n v. Gibbons*.¹⁵⁶ In that case, Congress had provided economic benefits for the employees of a railroad company that had declared bankruptcy.¹⁵⁷ The Court rejected the argument that the action had been an exercise of Congress's commerce power on the basis that the clause's structural purpose is to allocate resources in a bankruptcy situation.¹⁵⁸ Next, the Court examined whether the law was a valid exercise of Congress's bankruptcy power. The Court ruled that it was not because the law had made bankruptcy laws nonuniform by causing the particular

152. *Id.* at 250–51.

153. See Nachbar, *supra* note 12, at 293–94 (“The *Trade-Mark Cases* and *Heart of Atlanta* at the very least mean that when one power does not support legislation, Congress can look to another”); *id.* at 296 (“[T]he operating principle[] most clearly at work in *Heart of Atlanta* and the *Trade-Mark Cases* . . . [is] that the absence of a grant in one power-conferring provision is not indicative of the denial of that grant under another provision.”).

154. U.S. CONST. art. I, § 8, cl. 4.

155. *Id.* art. I, § 8, cl. 3.

156. *Ry. Labor Executives' Ass'n v. Gibbons*, 455 U.S. 457 (1982).

157. *Id.* at 461–63.

158. *Id.* at 465–67.

provisions at issue to conflict with the general bankruptcy provisions' priorities.¹⁵⁹ The Court reasoned that Congress could not invoke the Commerce Clause to enact nonuniform bankruptcy provisions because "the Bankruptcy Clause itself contains an affirmative limitation or restriction upon Congress' power: bankruptcy laws must be uniform throughout the United States."¹⁶⁰

Although Professor Nachbar suggests that *Gibbons* was incorrectly decided or should not be broadly applied to other Article I, Section 8 powers,¹⁶¹ the Court's reasoning applies even more strongly to the IP Clause. The historical and other evidence that the IP Clause should limit Congress's other enumerated powers is more robust than any evidence of the negative implications one might draw from the uniformity requirement of the Bankruptcy Clause.¹⁶² As such, the structural reasoning that the Court employed in the bankruptcy context ought to apply even more readily to the IP Clause to forbid Congress from evading the limited means allowed for promoting the progress of science and useful arts by invoking another enumerated power.

Having discussed the relevant judicial doctrine, I now turn to an analysis of policy considerations informing the IP Clause to provide another window into understanding the Clause's external limitations.

159. *Id.* at 468–71.

160. *Id.* at 468. Similar is *Perry v. United States*, 294 U.S. 330 (1935), which involved an alleged clash between Congress's power to establish a monetary system, U.S. CONST. art. I, § 8, cl. 5, and its power "To borrow Money on the credit of the United States," *id.* art. I, § 8, cl. 2. The Court in *Perry* held that "Congress can[not] use th[e first] power so as to invalidate the terms of the obligations which the government has theretofore issued in the exercise of the power to borrow money on the credit of the United States." *Perry*, 294 U.S. at 350. It reasoned that doing so would negate the promise inherent in the federal government's power to borrow money on U.S. credit. *Id.* at 353.

161. See Nachbar, *supra* note 12, at 308, 313 (reasoning that *Gibbons* would be "subject to failure if broadly applied" and finding that "blindly applying *Gibbons* would prevent federal regulation of purely intrastate commercial conduct . . . involving intellectual property").

162. Cf. Jane C. Ginsburg, *No "Sweat"?: Copyright and Other Protection of Works of Information After Feist v. Rural Telephone*, 92 COLUM. L. REV. 338, 370 (1992) ("Justice Rehnquist declared: 'If we were to hold that Congress had power to enact nonuniform bankruptcy laws pursuant to the Commerce Clause, we would eradicate from the Constitution a limitation on the power of Congress to enact bankruptcy laws.' Under this approach, one could contend that a law protecting compiled information under the Commerce Clause would similarly be invalidated as an attempt to elude a substantive limitation on Congress' power to grant copyrights." (footnote omitted) (quoting *Gibbons*, 455 U.S. at 468–69)).

D. Policy

The dominant policy underlying the protection of intellectual property in the United States is utilitarian and is grounded in the IP Clause. This utilitarian policy supplements the evidence discussed in the previous Sections to support the idea that the IP Clause externally limits Congress's ability to use means other than those specified in the IP Clause to promote the progress of science and useful arts.

Utilitarianism is the dominant purpose of American copyright¹⁶³ and patent law.¹⁶⁴ According to utilitarian theory, copyright law provides the incentive of exclusive rights for a limited duration to authors to motivate them to create culturally valuable works.¹⁶⁵ Without this incentive, the theory goes, authors might not invest the time, energy, or money necessary to create the works because such works might be copied cheaply and easily by free riders, thereby eliminating authors' ability to profit from their labors.¹⁶⁶ Parallel reasoning supports patent law's protection of inventors' exclusive rights in their technologically or scientifically valuable inventions for limited periods of time. The theory is that public benefits accrue by rewarding inventors for taking two steps they likely would not otherwise have taken: first, to invent, and possibly commercialize; and second, to reveal information to the public about their inventions that serves to stimulate further innovation.¹⁶⁷

Utilitarianism aligns with the IP Clause. Consistent with utilitarianism, the rights conferred by copyright and patent laws are designed to be limited in time and scope.¹⁶⁸ The reason for providing copyright and patent protection to creators is to encourage them to produce socially valuable works, thereby maximizing social welfare.¹⁶⁹

163. *E.g.*, *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 558 (1985); 122 CONG. REC. 2834 (1976) (statement of Sen. John Little McClellan); William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989).

164. *E.g.*, *Diamond v. Chakrabarty*, 447 U.S. 303, 307 (1980); Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1597–99 (2003).

165. Stewart E. Sterk, *Rhetoric and Reality in Copyright Law*, 94 MICH. L. REV. 1197, 1197 (1996).

166. Alina Ng, *The Author's Rights in Literary and Artistic Works*, 9 J. MARSHALL REV. INTELL. PROP. L. 453, 453–54 (2009).

167. Jeanne C. Fromer, *Patent Disclosure*, 94 IOWA L. REV. 539, 547–54 (2009).

168. Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 997 (1997).

169. Ralph S. Brown, *Eligibility for Copyright Protection: A Search for Principled Standards*, 70 MINN. L. REV. 579, 592–96 (1985).

If the provided rights were exceedingly extensive, society would be hurt and social welfare diminished.¹⁷⁰ Exclusive rights in intellectual property prevent competition in protected works, often allowing the rights holder to charge a premium for access and ultimately limiting these valuable works' diffusion into society.¹⁷¹ Moreover, given that knowledge is frequently cumulative, society benefits when subsequent creators are not prevented from building on previous artistic, scientific, and technological creations to generate new works.¹⁷² Therefore, copyright and patent laws ensure both that the works that they protect will fall into the public domain in due course and that third parties will be free to use the protected works for certain socially valuable purposes.¹⁷³

At bottom, utilitarian theories of intellectual property rest on the premise that the benefit to society of creators' crafting valuable works offsets the costs to society of the incentives the law offers to those creators.¹⁷⁴ The power conferred on Congress by the IP Clause reflects a desire to reach a balance between granting creators the exclusive rights to create and disseminate publicly valuable works and restricting those rights so that the public is not hurt.¹⁷⁵ The Supreme Court has stated as much in numerous decisions.¹⁷⁶ This principle is longstanding.¹⁷⁷ Congress may thus act to secure intellectual-property protection as long as it does not upset the carefully calibrated balance established by the IP Clause.¹⁷⁸

170. Lemley, *supra* note 168, at 996–97.

171. *Id.*

172. *Id.* at 997–98.

173. *Id.* at 999.

174. *Id.* at 996–97; *see also* PATRY, *supra* note 19, at 123 (“The Constitution is quite clear that Congress can only grant copyright to promote the progress of science, and thus this ‘burden’ exists from the inception of the rights, and follows those rights for the duration of the copyright.”).

175. Howard B. Abrams, *Copyright, Misappropriation, and Preemption: Constitutional and Statutory Limits of State Law Protection*, 1983 SUP. CT. REV. 509, 527–28.

176. *E.g.*, *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 526–27 (1994); *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989); *see also* *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480–81 (1974) (“[A]dditions to the general store of knowledge are of such importance to the public weal that the Federal Government is willing to pay the high price of 17 years of exclusive use”); *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 229–31 (1964) (“Patents are not given as favors . . . but are meant to encourage invention”).

177. *E.g.*, *Singer Mfg. Co. v. June Mfg. Co.*, 163 U.S. 169, 185–86 (1896).

178. *See id.* (“It is self evident that on the expiration of a patent the monopoly created by it ceases to exist, and the right to make the thing formerly covered by the patent becomes public property. It is upon this condition that the patent is granted.”).

In this vein, the Supreme Court has strongly indicated that the IP Clause contemplates the existence of a public domain that cannot be undone. For example, in the context of discussing the relationship between federal powers under the IP Clause and state authority, the Court has noted that

the ultimate goal of the patent system is to bring new designs and technologies into the public domain through disclosure. State law protection for techniques and designs whose disclosure has already been induced by market rewards may conflict with the very purpose of the patent laws by decreasing the range of ideas available as the building blocks of further innovation. . . . To a limited extent, the federal patent laws must determine not only what is protected, but also what is free for all to use.¹⁷⁹

The policy of maintaining a balance between public benefit and intellectual-property rights for creators is deeply utilitarian in promoting the progress of science and useful arts. Laws that upset this calibrated balance by transgressing the limits set by the IP Clause—say, by offering rights of unlimited duration or by offering rights to someone other than the creator—are therefore particularly troublesome. In this sense, policy interests support the idea that Congress is disallowed from using any of its powers to promote the progress of science and useful arts other than the power conferred by the IP Clause itself.

That said, one might readily imagine Congress's using means other than those specified in the IP Clause that, as a policy matter, do not upset the balance envisioned by the IP Clause. For example, federal funding of scientific research or cultural works would seem, as a policy matter, to promote the progress of science and useful arts without undermining public utility. At the right price, the cost of such funding would be exceeded by the public benefit, all without the monopoly-like effects that can result from patent and copyright laws.

On the whole, then, intellectual property's utilitarian basis—reflected in the IP Clause—supports the Clause's external limitations, at least as far as Congress might use its other powers to subvert the means set out in the IP Clause. To the extent that Congress would use its other powers to employ means that do not affect the calibrated

179. *Bonito Boats*, 489 U.S. at 151; see also *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966) ("Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available.").

balance set out in the IP Clause's text, these same policy concerns are not necessarily implicated.

* * *

This Part demonstrates that the combination of textual and structural analysis, historical evidence, judicial doctrine, and policy favors the existence of external limitations in the IP Clause that operate to ban Congress from using its other enumerated powers to promote the progress of science and useful arts via means not authorized by the IP Clause.

Some other scholars working on this topic conclude that the IP Clause limits Congress's other powers, but they take different approaches from the one advanced in this Article—approaches that either require more complex analytical frameworks or are less grounded in the foregoing evidence. For one, former Professor Patry does think that the IP Clause restricts Congress's other powers. He reads the Supreme Court's doctrine as holding that the IP Clause “contains both positive and negative rights: a positive right to grant authors a limited monopoly in their original material, and a negative right in the public to copy unoriginal material.”¹⁸⁰ Patry elaborates that “these two rights are mutually exclusive: either an author has an exclusive right over given material, or the public has a right to copy that material. Both rights cannot be exercised at the same time with respect to the same material.”¹⁸¹ As such, Patry claims that Congress may not provide for perpetual intellectual-property protection, as doing so would contravene the “limited Times” restriction of the IP Clause.¹⁸² Similarly, according to Patry, databases lacking sufficient constitutional originality to qualify for copyright protection should not be protectable under legislation enacted pursuant to one of Congress's other powers.¹⁸³

Former Professor Patry's analysis does not go far enough in light of the evidence presented in this Part. By insisting that Congress's powers are restricted only with regard to unoriginal material, Patry does not address the evidence supporting an understanding that all means that are not specified in the IP Clause are off-limits.

180. Patry, *supra* note 17, at 362.

181. *Id.* at 364.

182. *Id.* at 376 (quoting U.S. CONST. art. 1, § 8, cl. 8).

183. *Id.* at 384–86.

Like former Professor Patry, Professor Yochai Benkler proposes that the IP Clause is “a specifically limited grant available only to protect original contributions to the wealth of human knowledge”¹⁸⁴ and that Congress cannot legislate beyond those bounds, even using its other powers.¹⁸⁵ More specifically, Benkler suggests that

Congress may create [IP] rights if and when they are likely to encourage information production more than they inhibit it, if it makes them available only to those who make original contributions to the wealth of our collective knowledge, and if the exclusive right enacted does not remove, or burden free access to, information already in the public domain.¹⁸⁶

Benkler suggests that Congress can use its other powers to “regulate information markets” only if the laws that it creates are different in kind from those authorized under the IP Clause.¹⁸⁷ To derive these limitations, Benkler relies on doctrinal and policy analysis,¹⁸⁸ along with what seems to be an implicit argument that the IP Clause’s restrictions would be too easy to evade if they did not limit Congress’s other powers. Under his framework, Benkler concludes that some possible legislation protecting databases is unconstitutional.¹⁸⁹

Professors Paul Schwartz and William Treanor call Professor Benkler’s analysis “a highly unconventional originalist linguistic argument, which turns on the Framers’ alleged understanding of a single word: ‘Progress.’”¹⁹⁰ In any event, like former Professor Patry’s position, Benkler’s analysis does not go as far as it might in light of the myriad pieces of evidence suggesting that all means not specified in the IP Clause are off-limits to Congress.

Professors Paul Heald and Suzanna Sherry also think that the IP Clause limits Congress’s other powers. They rely on early American history, which they read as reflecting a widespread suspicion toward governmental grants of exclusive rights, to suggest that “the Intellectual Property Clause was included as both a grant of power to

184. Benkler, *supra* note 16, at 540.

185. *Id.* at 536–40.

186. *Id.* at 551.

187. *Id.* at 551–52.

188. *Id.* at 558–74.

189. *Id.* at 575–87.

190. Schwartz & Treanor, *supra* note 42, at 2340–41.

Congress and also an absolute limitation of its power.”¹⁹¹ Based on this reading, they identify five principles that delineate the reach of Congress’s IP powers: the “Suspect Grant Principle,” which provides that “the limiting language of the Clause . . . [applies] only to legislation that imposes monopoly-like costs on the public through the granting of exclusive rights”;¹⁹² the “Quid Pro Principle,” under which laws enacted pursuant to the Clause must be premised on “the author or the inventor . . . giv[ing] the public something it did not have before to earn a grant of exclusive rights from Congress”;¹⁹³ the “Authorship Principle,” which dictates that the creator must receive the grant of exclusive rights;¹⁹⁴ the “Public Domain Principle,” which specifies that the rights should last for a limited time, after which point the protected work must fall into the public domain;¹⁹⁵ and the “Flexibility Principle,” which provides Congress with broad discretion to decide how to wield its powers under the IP Clause.¹⁹⁶ Heald and Sherry conclude that Congress may not use its other powers, such as the commerce or treaty powers, to enact laws that flout these principles.¹⁹⁷ They suggest that these principles can holistically guide decisions on various laws’ constitutionality.¹⁹⁸ For example, they use their framework to suggest that the copyright-term extension that the Supreme Court upheld in *Eldred*¹⁹⁹ is unconstitutional because it violates the Quid Pro Principle and the Public Domain Principle.²⁰⁰

Although the holistic framework of Professors Heald and Sherry shares points of commonality with the more streamlined approach I take, it is too complex both to conceptualize and to apply.²⁰¹

191. Heald & Sherry, *supra* note 18, at 1160. Professor Pollack similarly reads various limitations into the IP Clause, including that the Clause “prevents Congress from giving authors or inventors exclusive rights unbounded by premeasured time limitations.” Malla Pollack, *Unconstitutional Incontestability? The Intersection of the Intellectual Property and Commerce Clauses of the Constitution: Beyond a Critique of Shakespeare Co. v. Silstar Corp.*, 18 SEATTLE U. L. REV. 259, 260 (1995).

192. Heald & Sherry, *supra* note 18, at 1160 (emphasis omitted).

193. *Id.* at 1162.

194. *Id.* at 1164.

195. *Id.* at 1165.

196. *Id.* at 1166–67.

197. *Id.* at 1167.

198. *Id.* at 1167, 1197.

199. *See supra* text accompanying notes 139–47.

200. Heald & Sherry, *supra* note 18, at 1168–74.

201. Schwartz & Treanor, *supra* note 42, at 2341–42.

To sum up, this Part surveys considerable evidence from multiple vantage points—text, structure, history, judicial doctrine, and policy—that supports the IP Clause’s external limitations. This Part thus refutes the claims of Professor Thomas Nachbar that the IP Clause does not reach out to limit Congress’s other powers. Moreover, it yields a framework for evaluating laws’ constitutionality, a subject to which I now turn.

II. FRAMEWORK FOR EVALUATING CONSTITUTIONALITY

This Part builds on Part I’s evidence of the IP Clause’s external limitations to suggest a framework for evaluating a law’s constitutionality. Generally, if a law has only the structural purpose of promoting the progress of science and useful arts, it must comply with the means described in the IP Clause. If it does not comply with those means, it is unconstitutional. If the law lacks the structural purpose of promoting the progress of science and useful arts, it is outside the IP Clause’s purview and must be enacted pursuant to another of Congress’s powers, as is the case with trademark law. If, in addition to the structural purpose of promoting the progress of science and useful arts, the law has another legitimate purpose pursuant to Congress’s other powers, such as promoting trade or foreign relations, Congress may act beyond the IP Clause’s means only if it overcomes a presumption against the law’s constitutionality. That is, the law ought to be deemed constitutional only if clear and convincing evidence demonstrates that Congress intentionally chose to supersede the IP Clause’s means because of paramount interests pursuant to its other more permissive powers. This presumption ought to be extremely hard to overcome when a law’s means subvert those in the IP Clause—such as by granting perpetual copyright protection—as compared to a law whose means merely are not contained in the IP Clause—such as funding for scientific research.

Section A of this Part discusses how to assess whether a law’s function is to promote the progress of science and useful arts through the lens of structural purpose. It also addresses how to analyze laws with multiple legitimate constitutional purposes, creating a presumption framework for assessing constitutionality in those cases. Section B then turns to some of the most likely sources of conflict with the IP Clause: the commerce, spending, necessary-and-proper, and treaty powers.

A. *Is the Law's Function To Promote Progress?*

Honoring the IP Clause's external limitations requires an understanding of when Congress is seeking to promote the progress of science and useful arts to help determine whether a given law should be understood to be within the IP Clause's purview.²⁰² This Section explores how to understand the first part of the IP Clause. Broken down, "To promote the Progress of Science and useful Arts" generally refers to the goal of encouraging the advancement of systematic knowledge, cultural knowledge, and technology. I then work out how to assess whether a law has this end and thus falls within the scope of the IP Clause, meaning that it may use only the IP Clause's specified means.

According to the Supreme Court, "to promote" as used in the IP Clause means "'to stimulate,' 'to encourage,' or 'to induce.'"²⁰³ Most commentators understand "progress" to mean advancement.²⁰⁴ As Professor Solum explains further, "progress" can be understood either as "advancement of learning [with a] focus on the results of scientific activity" or as "encouraging the activity itself [with a] focus on the process itself."²⁰⁵ The first understanding can further mean improvement in a knowledge base's quality or quantity.

Rejecting an approach like Professor Solum's, Professor Malla Pollack concludes on the basis of some historical linguistic evidence that "progress" means spread, diffusion, or distribution.²⁰⁶ She rejects Solum's possible meanings in large part because under those meanings, she argues that "to promote the progress of science and useful arts" would have the same meaning as "to promote science and useful arts."²⁰⁷ Pollack's objection, however, is unpersuasive. The former phrase might straightforwardly be understood to mean that the Framers wanted to provide Congress the power to promote—both directly and indirectly—the movement of science and useful arts in forward directions. This capacious ambition would not have been communicated by the latter language. Moreover, as Solum observes,

202. Cf. Solum, *supra* note 13, at 3 ("[T]he Copyright Clause requires that Congress pursue the goal of promoting the progress of science.").

203. Goldstein v. California, 412 U.S. 546, 555 (1973).

204. E.g., Solum, *supra* note 13, at 45; Walterscheid, *supra* note 123, at 93; Walterscheid, *supra* note 19, at 376.

205. Solum, *supra* note 13, at 45–46.

206. Pollack, *supra* note 19, at 755–57, 794–95, 809.

207. *Id.* at 788–94.

the linguistic evidence Pollack presents is consistent with his favored understanding and in fact represents the more usual understanding of the term “progress.”²⁰⁸ I thus presume that Solum’s understanding is correct, although my framework would also work with Pollack’s definition.

“Science” as it appears in the IP Clause did not originally have the meaning contemporary Americans associate with it—biology, chemistry, and the like. Instead, at the time of the Framing, science meant knowledge or learning, particularly of the kind that is systematic and of enduring value.²⁰⁹ That meaning makes particular sense in light of the fact that one of James Madison’s four constitutional proposals that yielded the IP Clause sought “the advancement of useful knowledge.”²¹⁰ For the most part, this goal of advancement corresponds to what the Constitution encourages in copyright law: the production of cultural goods and knowledge.

The term “useful arts,” confusingly enough, has nothing to do with cultural or fine arts. Rather, at the time of the Framing, it meant “helpful or valuable trades,” such as mechanical and civil engineering.²¹¹ Useful arts were understood to be skills that were practical rather than theoretical.²¹² They were principally what modern Americans have come to understand as technology,²¹³ and they are what patent law is intended to promote.

In sum, then, the evidence seems to show that a law is about promoting the progress of science and useful arts if it seeks to encourage advancement in areas of systematic knowledge, including cultural knowledge or technology.

This understanding provides a definition to help assess whether a law is focused on promoting the progress of science and useful arts so

208. See Solum, *supra* note 13, at 46–47 (“[G]iven that the common-sense interpretation of the term ‘progress’ involves a figurative use, the prevalence of the underlying literal use only reinforces the possibility that the term was used in the common figurative sense.”).

209. EDWARD C. WALTERSCHEID, *THE NATURE OF THE INTELLECTUAL PROPERTY CLAUSE: A STUDY IN HISTORICAL PERSPECTIVE* 125 & n.46 (2002); see also Solum, *supra* note 13, at 3 (“[Th]e meaning of science that best coheres with the constitutional text and the original understanding can be glossed as systematic knowledge or learning of enduring value”); *id.* at 51–52 (identifying the earliest federal copyright law’s reference to “encouragement of learning” as a synonym for “promot[ing] the Progress of science” (internal quotation marks omitted)).

210. See *supra* text accompanying note 62.

211. WALTERSCHEID, *supra* note 209, at 126.

212. *Id.* at 128.

213. Edward Lee, *Technological Fair Use*, 83 S. CAL. L. REV. 797, 819 (2010).

as to tell whether Congress must respect the IP Clause's external limitations. But observers have many ways with which to measure whether a law has this purpose, such as by gauging different legislators' views or by looking to legislation's stated purposes. Canvassing different legislators' views is very slippery, as assigning a unified purpose to a multimember body is difficult.²¹⁴ At the other extreme, looking conclusively to a law's stated purpose—or, similarly, to its stated constitutional authority—gives Congress the easy escape valve of stating one purpose—or power—when in fact it has another in mind. Relying too much on this measurement would permit Congress to evade the IP Clause's external limitations. Another possible test would be to investigate whether a law actually has the effect of promoting the progress of science and useful arts. Such a test is not ideal, however, both because judging legislation's actual effect can be difficult at the outset and because courts might not be institutionally competent to make such a determination.²¹⁵ Additionally, the Supreme Court has emphasized in numerous cases that Congress should not be second-guessed on whether its laws enacted under the IP Clause actually promote the progress of science and useful arts.²¹⁶

Instead, I suggest that the optimal way to measure whether a law aims to promote the progress of science and useful arts is to assess its structural purpose. This approach is consistent with the way the Supreme Court typically evaluates a law's purpose to determine its constitutionality, including in the context of intellectual property.²¹⁷ In *Eldred*, the Court reasoned that a helpful mode of analysis was to

214. See William W. Buzbee, *The One-Congress Fiction in Statutory Interpretation*, 149 U. PA. L. REV. 171, 173 (2000) (“[T]he concept of a single Congress producing legislation is undoubtedly a fiction.”).

215. Cf. Schwartz & Treanor, *supra* note 42, at 2334 (arguing for deferential review of “congressional legislation affecting intellectual property . . . because of concerns about institutional competence and respect for majoritarian decisionmaking”).

216. See, e.g., *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 168 (1989) (“It is for Congress to determine if the present system of design and utility patents is ineffectual in promoting the useful arts in the context of industrial design.”).

217. See Caleb Nelson, *Judicial Review of Legislative Purpose*, 83 N.Y.U. L. REV. 1784, 1788 (2008) (“[C]ourts . . . had long been willing to consider some objective indicia of legislative purpose in deciding whether a statute was even superficially valid.”); see also David L. Franklin, *Facial Challenges, Legislative Purpose, and the Commerce Clause*, 92 IOWA L. REV. 41, 90–91 (2006) (“[A]n understanding of *constitutional meaning* that includes a requirement of legitimate legislative purpose—in short, a judicial concern with the commercial ends or aims of the challenged statute as a whole—lies beneath the doctrinal surface [of Commerce Clause jurisprudence].”).

assess a law's purpose structurally.²¹⁸ In *Gibbons*, the Court assessed the relevant law's constitutionality by reasoning that its structural purpose was to allocate resources in a bankruptcy situation and that it must therefore comply with the Bankruptcy Clause's limitations.²¹⁹ Starting with *McCulloch v. Maryland*,²²⁰ numerous Court decisions also suggest that an analysis of structural purpose is essential to ensure that Congress is acting within its powers.²²¹

As Professor John Manning notes, "Few would deny the possibility of gleaning a statute's overall purpose from its structure or from the aims suggested by the text itself."²²² Although reasonable minds might differ as to a law's structural purpose, the law ultimately passed by Congress often gives significant clues as to the purpose or power used. For example, relevant pieces of information include the intended effects or causes of the legislation, the stated effects or causes, and the statute's desired placement alongside other laws with a similar purpose or power.

This reasoning suggests that if Congress is acting with the structural purpose of promoting the progress of science and useful arts, it must comply with the IP Clause's means. If it employs other means for that purpose, it is acting beyond its powers.

How, though, should courts analyze laws that have multiple material purposes? For example, a law providing copyright or patent protection to foreign creators might be aimed at promoting the progress of science and useful arts, but it might also be aimed at promoting interstate and foreign commerce. Or a law regulating intellectual property pursuant to a treaty obligation of the United States might be directed both at promoting the progress of science

218. See *supra* text accompanying notes 139–47.

219. See *supra* text accompanying notes 156–60.

220. *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316 (1819).

221. See *id.* at 423 ("Should Congress, in the execution of its powers, adopt measures which are prohibited by the constitution; or should Congress, under the pretext of executing its powers, pass laws for the accomplishment of objects not entrusted to the government; it would become the painful duty of this tribunal . . . to say that such an act was not the law of the land."); see also *Soon Hing v. Crowley*, 113 U.S. 703, 710 (1885) ("[T]he rule is general with reference to the enactments of all legislative bodies that the courts cannot inquire into the motives of the legislators in passing them, except as they may be disclosed on the face of the acts, or inferrible from their operation, considered with reference to the condition of the country and existing legislation."); *The Head Money Cases*, 112 U.S. 580, 595 (1884) (looking to the structural purpose of a federal law levying a per-passenger fee on vessels from foreign ports to determine whether the law was an exercise of Congress's commerce power).

222. John F. Manning, *The Absurdity Doctrine*, 116 HARV. L. REV. 2387, 2408 n.75 (2003).

and useful arts and American foreign-relations interests. Congress, in such cases, has multiple legitimate constitutional interests, and those interests may point in competing directions. For example, foreign-relations or trade interests might suggest that a law ought to extend beyond the IP Clause's means, whereas intellectual-property interests would counsel otherwise. In these cases, there are competing considerations. On the one hand, the IP Clause, as demonstrated herein, externally limits Congress's other powers. On the other, Congress can have purposes other than intellectual-property regulation in mind in enacting a law.

To resolve these competing considerations, a presumption framework is helpful to ensure that if Congress is evading the IP Clause's means, it is doing so because it feels compelled to do so due to competing constitutional interests.²²³ That is, laws that have a purpose of promoting the progress of science and useful arts ought to be presumed unconstitutional unless clear and convincing evidence shows that Congress considered superseding the IP Clause's means important due to other legitimate, material constitutional interests, such as foreign relations or commerce. Of course, these other interests must be legitimate and not merely asserted as a sham to bypass the IP Clause's external limitations.²²⁴ Otherwise, laws with multiple purposes would easily evade the IP Clause's limited means, which together operate as a sensible restriction on Congress's authority.²²⁵

This presumption framework would, as Professors Samuel Issacharoff and Richard Pildes note in a different context, place "the judicial emphasis on second-order issues of appropriate institutions and processes, through which courts seek mainly to ensure that the

223. Cf. Samuel Issacharoff, *Meriwether Lewis, the Air Force, and the Surge: The Problem of Constitutional Settlement*, 12 LEWIS & CLARK L. REV. 649, 653 (2008) ("[O]ur Constitution must incorporate not only the text and the judicial constructions of it, but the accommodations reached by the political branches in the difficult task of actually administering a constitutional democracy.").

224. Cf. *United States v. Morrison*, 529 U.S. 598, 601–02, 615 (2000) (striking down as an unconstitutional exercise of Congress's commerce power a federal law that provided a "civil remedy for victims of gender-motivated violence," despite congressional findings that such violence substantially affected interstate commerce, because Congress had "rel[ie]d" so heavily on a method of reasoning that [the Court] ha[d] already rejected as unworkable").

225. Cf. M. David Lepofsky, *The Canadian Judicial Approach to Equality Rights: Freedom Ride or Roller Coaster?*, 55 LAW & CONTEMP. PROBS. 167, 189 (1992) (refusing to distinguish between laws with a particular single purpose and those with multiple purposes, "lest a legislature be able to piggy-back legislative purposes to enable it to do that which the Constitution forbids").

right institutional process supports the tradeoff between [competing constitutional interests] at issue.”²²⁶ This process-oriented approach would take cognizance of Congress’s better placement, as compared to courts’, to evaluate how to trade off between multiple policy interests when more than one constitutional authority is at stake in the context of intellectual property.²²⁷ This presumption framework would transform the constitutional inquiry into one of statutory interpretation, one with which courts ought to feel more comfortable.²²⁸

This presumption of unconstitutionality ought to be harder to overcome in certain circumstances than in others. In particular, Congress might enact laws that subvert the IP Clause’s means, such as by enacting perpetual copyright protection, granting patent rights to someone other than the inventor, or granting protection to works that are neither writings nor discoveries.²²⁹ Such laws would contravene the IP Clause’s external limitations most directly, by upsetting the calibrated balance of the IP Clause, a balance between a grant of incentives to authors and inventors and a broader public benefit.²³⁰ In such situations, the presumption of unconstitutionality ought to be extremely hard to overcome. By comparison, the presumption ought to be somewhat easier to overcome for a law whose means merely are not contained in the IP Clause, such as funding for scientific research.²³¹

In sum, then, legislation with the material structural purpose of promoting the progress of science and useful arts must use only the

226. Samuel Issacharoff & Richard H. Pildes, *Between Civil Libertarianism and Executive Unilateralism: An Institutional Process Approach to Rights During Wartime*, 5 THEORETICAL INQUIRIES L. 1, 44–45 (2004).

227. Cf. *id.* (making a parallel observation in regard to bilateral institutional actions that trade off between liberty and security).

228. This transformation happens in many areas of the law, including extraterritoriality of domestic laws, federal preemption of state laws, and treaty obligations. See *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 454–55 (2007) (“The presumption that United States law governs domestically but does not rule the world applies with particular force in patent law.”); *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947) (noting that there is a presumption against federal preemption of state laws unless “that was the clear and manifest purpose of Congress”); *Murray v. Schooner Charming Betsy*, 6 U.S. (2 Cranch) 64, 118 (1804) (“[A]n act of Congress ought never to be construed to violate the law of nations if any other possible construction remains, and consequently can never be construed to violate neutral rights, or to affect neutral commerce, further than is warranted by the law of nations as understood in this country.”).

229. Cf. *infra* Part III.B.

230. See *supra* Part I.D.

231. Cf. *infra* Part III.E.

means specified in the IP Clause to effectuate that end. If such a law uses other means, it is unconstitutional. Moreover, if a law has multiple legitimate constitutional purposes, one of which is to promote the progress of science and useful arts, it should be presumed to be unconstitutional if it does not comply with the IP Clause's means, unless there is clear and convincing evidence that Congress has chosen to supersede those means because of overriding interests pursuant to another legitimate constitutional power.

The means specified in the IP Clause require "securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."²³² In relevant part, then, as elaborated in the next Section and in Part III, to comply with those means, a law must include a grant of an exclusive right that is limited in time to someone who qualifies as an author of something that is his or her writing, or to someone who qualifies as an inventor of something that is his or her invention.

B. Potential Conflicts

Before delving in the next Part into some federal laws of dubious constitutionality in light of the IP Clause's external limitations, I first analyze the four constitutional powers most likely to conflict with, and to provide cover for evading, the Clause's external limitations: the commerce, spending, necessary-and-proper, and treaty powers. After setting out the nature of these possible collisions—in the simple case of a law's having the single purpose of promoting the progress of science and useful arts—I return to the presumption framework. I return to that framework to examine how extensively it might efface the IP Clause's external limitations in light of a nuanced understanding of the varied constitutional interests that might be invoked in enacting a law.

1. *Commerce Clause.* Although most think the Commerce Clause, as originally understood, described only a narrow power,²³³ its reach has grown to be extensive. The Commerce Clause has been described by the Supreme Court as authorizing three broad classes of regulation: (1) laws that "regulate the channels of interstate commerce"; (2) laws that "regulate and protect the instrumentalities of interstate commerce"; and (3) laws that "regulate activities that

232. U.S. CONST. art. I, § 8, cl. 8.

233. See *supra* note 108 and accompanying text.

substantially affect interstate commerce.”²³⁴ Included in this third category are “purely local activities that are part of an economic ‘class of activities’ that have a substantial effect on interstate commerce.”²³⁵ Furthermore, the Court has said that “Congress can regulate purely intrastate activity that is not itself ‘commercial,’ in that it is not produced for sale, if it concludes that failure to regulate that class of activity would undercut the regulation of the interstate market in that commodity.”²³⁶ Although these categories might betray some limitations on Congress’s commerce power, the power is, nevertheless, quite extensive.

But for the IP Clause’s external limitations, most intellectual-property legislation could likely be enacted under the cover of this expansive understanding of the Commerce Clause. Artistic, scientific, and technological works that are encouraged by intellectual-property legislation can typically be linked to activities that substantially affect interstate commerce.

If a law were aimed at promoting the progress of science and useful arts but failed to comply with the IP Clause’s means, then the federal government would be likely to defend that law by reference to the Commerce Clause.²³⁷ As the discussion in Part I reveals, however, Congress is acting outside of its constitutional authority when it attempts to use the Commerce Clause to promote the progress of science and useful arts while not restricting itself to the IP Clause’s means, unless Congress can show clearly and convincingly that it had legitimate material interests under the Commerce Clause that necessitated a transgression of the IP Clause’s limited means.

The collision between the Commerce and IP Clauses is direct. The other three powers that might collide with the IP Clause—the spending, necessary-and-proper, and treaty powers—to which I will now turn, clash less obviously or directly, if at all.

2. Spending Clause. Another constitutional provision that might conflict with the IP Clause’s external limitations is Article I’s Spending Clause. That clause authorizes Congress to “lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for

234. *Gonzales v. Raich*, 545 U.S. 1, 16–17 (2005).

235. *Id.* at 17.

236. *Id.* at 18.

237. For one example, see *infra* Part III.B.

the common Defence and general Welfare of the United States.”²³⁸ Early history—particularly congressional worries about funding a research expedition²³⁹—suggests a great potential for conflict between the Spending and IP Clauses.

As mentioned in Part I.B, in the nation’s early history, commentators held differing views on the Spending Clause’s reach. In 1791, Alexander Hamilton submitted to Congress his *Report on the Subject of Manufactures*, in which he argued that Congress had the authority under the Spending Clause to award “[p]ecuniary bounties” to encourage American manufacturing.²⁴⁰ Hamilton’s argument was meant to counter congressional opposition to using means beyond those elaborated in the IP Clause to promote the progress of science and useful arts.²⁴¹ Hamilton claimed that the Spending Clause could be used to spend for the general welfare, even if the spending was for a purpose not otherwise enumerated in the Constitution as a congressional power.²⁴² Nonetheless, Hamilton thought that spending could not be used to evade express or fairly implied limitations on congressional powers.²⁴³ Given his proposal to fund manufacturing endeavors, however, Hamilton apparently did not find the limitations on the IP Clause to rise to that level. In fact, Hamilton’s expansive view of the Spending Clause seems to have stemmed in part from his constrictive understanding of the reach of the IP Clause.²⁴⁴

Both Thomas Jefferson and James Madison challenged Hamilton’s view. They understood the Spending Clause to allow for congressional spending that is consistent with the other enumerated powers.²⁴⁵ Pursuant to this understanding, and given the IP Clause’s

238. U.S. CONST. art. I, § 8, cl. 1.

239. See *supra* text accompanying notes 116–27.

240. Hamilton, *supra* note 106, at 298, 303–04 (“No objection ought to arise to this construction from a supposition that it would imply a power to do whatever else should appear to Congress conducive to the General Welfare. A power to appropriate money with this latitude which is granted too in *express terms* would not carry a power to do any other thing, not authorised in the constitution, either expressly or by fair implication.”). Hamilton appeared to be suggesting rewards for those who had made successful inventions, rather than general funding of scientific innovation. Walterscheid, *supra* note 123, at 110.

241. Walterscheid, *supra* note 123, at 101–03.

242. Hamilton, *supra* note 106, at 303–04.

243. *Id.*

244. See Walterscheid, *supra* note 123, at 108–09 (noting that Hamilton’s views were “predicated on a narrow interpretation of the language of the intellectual property clause”).

245. Letter from Thomas Jefferson to Albert Gallatin (June 16, 1817), *reprinted in* 15 THE WRITINGS OF THOMAS JEFFERSON, 131, 133 (Albert Ellery Bergh ed., 1907); Letter from James

external limitations, Congress would have lacked authority to promote the progress of science and useful arts through grants. Jefferson and Madison's view prevailed until the New Deal era. Congress did not fund research and development in its early years.²⁴⁶

But the Supreme Court later adopted Hamilton's view in 1936, in a case²⁴⁷ analyzing the constitutionality of processing and floor-stock taxes under Congress's Agricultural Adjustment Act.²⁴⁸ The Court in that case held that "public funds may be appropriated 'to provide for the general welfare of the United States.'"²⁴⁹ Rejecting Jefferson and Madison's view, the Court stated that "the power of Congress to authorize expenditure of public moneys for public purposes is not limited by the direct grants of legislative power found in the Constitution," but rather by the confines of the Spending Clause.²⁵⁰

The Court has since indicated that "[i]ncident to [the spending] power, Congress may attach conditions on the receipt of federal funds," even for "objectives not thought to be within Article I's 'enumerated legislative fields,'" subject to several limitations.²⁵¹ The first of these limitations is that the "exercise of the spending power must be in pursuit of the 'general [W]elfare.'"²⁵² Second, "other constitutional provisions may provide an independent bar to the conditional grant of federal funds."²⁵³ As explained by the Court, "the power may not be used to induce [recipients] to engage in activities that would themselves be unconstitutional,"²⁵⁴ nor may it be used to prohibit "the indirect achievement of objectives which Congress is not empowered to achieve directly."²⁵⁵ These ostensible caveats notwithstanding, the Supreme Court has tended to interpret the

Madison to Thomas Jefferson (Jan. 18, 1800), *reprinted in* 6 THE WRITINGS OF JAMES MADISON, *supra* note 111, at 347, 357.

246. See Walterscheid, *supra* note 123, at 113–14 ("Regardless of Washington's views, both Jefferson and Madison rather quickly challenged Hamilton's broad interpretation of the spending power under the general welfare clause, and Congress was not generally disposed to adopt it for the purpose of either creating a national university or funding R&D" (footnote omitted)).

247. *United States v. Butler*, 297 U.S. 1, 65–66 (1936).

248. Agricultural Adjustment Act, ch. 25, 48 Stat. 31 (1933), *invalidated by* *United States v. Butler*, 297 U.S. 1 (1936).

249. *Butler*, 297 U.S. at 65.

250. *Id.* at 66.

251. *South Dakota v. Dole*, 483 U.S. 203, 206–07 (1987) (quoting *Butler*, 297 U.S. at 65).

252. *Id.* (quoting U.S. CONST. art. I, § 8, cl. 1).

253. *Id.* at 208.

254. *Id.* at 210.

255. *Id.*

Spending Clause expansively, ensuring that even these limitations are narrowly applied.²⁵⁶

Although Madison and Jefferson may in fact have had the more appropriate understanding of the Spending Clause, particularly in view of early congressional practice, the Supreme Court's holdings seem to foreclose the return of that view. This reality, however, does not necessarily mean that Congress may spend to promote the progress of science and useful arts in violation of the IP Clause's means. Much in the same fashion that the Commerce Clause is constrained by the IP Clause's limited means, a strong case can be made that Congress cannot rely on the Spending Clause to initiate spending to promote the progress of science and useful arts. Even accepting that the Spending Clause is an independent power, one might still see the IP Clause as providing an external limit on that Article I power.²⁵⁷ In fact, the Supreme Court's understanding that other constitutional limitations can restrict the Spending Clause's reach could be understood to prohibit congressional spending to promote the progress of science and useful arts using means other than those laid out in the IP Clause. Nonetheless, given the Supreme Court's expansive understanding of the Spending Clause over time, the Court might not as readily find that the IP Clause's limitations do in fact inhibit Congress's authority under the Spending Clause.

3. *Necessary and Proper Clause.* Another broad constitutional power conferred upon Congress permits the legislature "To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof."²⁵⁸ My discussion here explores the potential of the Necessary and Proper Clause to conflict with the IP Clause's external limitations.

As interpreted by the Supreme Court, the Necessary and Proper Clause supplements the more specific grants of power to Congress by conferring on Congress the "broad power to enact laws that are

256. David Freeman Engstrom, *Drawing Lines Between Chevron and Pennhurst: A Functional Analysis of the Spending Power, Federalism, and the Administrative State*, 82 TEX. L. REV. 1197, 1198–99 (2004).

257. *But see* Heald & Sherry, *supra* note 18, at 1174–75 ("[There exists a] clearly constitutional method by which Congress can direct public monies to the copyright industry: outright subsidies.").

258. U.S. CONST. art. I, § 8, cl. 18.

‘convenient, or useful’ or ‘conducive’ to the authority’s ‘beneficial exercise.’”²⁵⁹ As the Court explained in *McCulloch v. Maryland*, “necessary” does not require that the action be “*absolutely* necessary.”²⁶⁰ Rather, as *McCulloch* explained, “Let the end be legitimate, let it be within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consist with the letter and spirit of the constitution, are constitutional.”²⁶¹ A law is proper under this Clause, then, if it “constitutes a means that is rationally related to the implementation of a constitutionally enumerated power.”²⁶²

Does this power enable Congress to legislate to promote the progress of science and useful arts beyond the means specified in the IP Clause? Not wholly. Rather, the Supreme Court’s jurisprudence suggests that, at most, the Necessary and Proper Clause gives Congress the power to legislate to help implement the IP Clause. Because the IP Clause specifies the limited means by which Congress may legislate to achieve a specified end, Congress can use the Necessary and Proper Clause to promote the progress of science and useful arts, but only by legislating in ways that support the means specified in the IP Clause. The Clause does not allow Congress to use other means more broadly to promote the progress of science and useful arts. That is, Congress can establish a patent office to examine patents before granting them and can require or encourage deposits of copyrighted materials in a central repository, even though these means are not literally within the IP Clause’s scope. What is less clear is whether Congress can use other means further afield from the implementation of copyright and patent laws. I return to this issue in the next Part as I consider federal funding of artistic and scientific works.

This analysis is consonant with the Supreme Court’s interpretation of the Necessary and Proper Clause as a source of congressional power. That is, congressional exercises of power under the Clause are not constricted by the IP Clause insofar as they seek to help execute the means and ends of the IP Clause. Consider that in

259. *United States v. Comstock*, 130 S. Ct. 1949, 1956 (2010) (quoting *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 413, 418 (1819)) (upholding Congress’s power to commit mentally ill sex offenders civilly after they have completed their criminal sentences).

260. *McCulloch*, 17 U.S. (4 Wheat.) at 414–15.

261. *Id.* at 421.

262. *Comstock*, 130 S. Ct. at 1956.

McCulloch, Chief Justice Marshall indicated that the Necessary and Proper Clause cannot be invoked by Congress to enact a law that is forbidden by the Constitution, even if the Clause would otherwise permit it.²⁶³ Because, as this Article argues, Congress is forbidden from using means other than those laid out in the IP Clause to promote the progress of science and useful arts, in certain instances Congress may likewise be forbidden from pursuing the same goal generally via the Necessary and Proper Clause. Congress may, however, use the Necessary and Proper Clause to support the means it employs in service of the IP Clause's ends.

4. *Treaty Powers.* The federal government's treaty powers also might come into conflict with the IP Clause's external limitations. As I discuss here, the federal government's traditional treaty power is not a congressional power in the way that the commerce, spending, and necessary-and-proper powers are. When the federal government is exercising this traditional power, a reasonable argument can be made for the proposition that the IP Clause does not externally limit this power. This argument is somewhat less powerful, however, with respect to non-self-executing treaties, which Congress implements through legislation. Furthermore, the IP Clause even more likely imposes external limits on Congress when it enacts congressional-executive agreements.

According to Article II of the Constitution, the president "shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur."²⁶⁴ The Supreme Court, in *Missouri v. Holland*,²⁶⁵ approved a broad understanding of this treaty power. In upholding a treaty between the United States and Great Britain regulating the killing of migratory birds, the Court rejected the argument that "what an act of Congress could not do unaided, in derogation of the powers reserved to the States, a treaty cannot do."²⁶⁶ That is, even if Congress lacks authority to regulate the killing of migratory birds with its Article I, Section 8 powers—particularly the Commerce Clause—that fact alone does not

263. *McCulloch*, 17 U.S. (4 Wheat.) at 421.

264. U.S. CONST. art. II, § 2, cl. 2.

265. *Missouri v. Holland*, 252 U.S. 416 (1920).

266. *Id.* at 432.

prohibit the federal government from exercising its Article II treaty-making powers to accomplish the same effect.²⁶⁷

Nonetheless, as the Supreme Court recognized in *Reid v. Covert*,²⁶⁸ the Article II treaty power does have limitations. In that case, the Court struck down an executive agreement between the United States and Great Britain that had “permitted United States’ military courts to exercise exclusive jurisdiction over offenses committed in Great Britain by American servicemen or their dependents” because the agreement forced the wives of soldiers to be tried in military court, depriving them of their Fifth and Sixth Amendment rights.²⁶⁹ The Court reasoned that “[t]he prohibitions of the Constitution were designed to apply to all branches of the National Government and they cannot be nullified by the Executive or by the Executive and the Senate combined.”²⁷⁰ In other words, the Constitution’s prohibitions on governmental power trump the treaty power.²⁷¹

When a treaty passed pursuant to the Article II treaty-making power seeks to promote the progress of science and useful arts, one could make a plausible case that the IP Clause does not externally limit the treaty to using only the means specified in the IP Clause itself.²⁷² As Professor Graeme Dinwoodie observes, “[T]he Treaty Clause presents a weaker case for the imposition of structural constraints not only because the limits in the [IP] Clause appear unrelated to the structure of government, but also because the independent exercise of the Treaty Clause appears affirmatively supportive of a governmental vision contained in the Constitution.”²⁷³ Specifically, the treaty power is situated among the president’s

267. *Id.* at 432–35.

268. *Reid v. Covert*, 354 U.S. 1 (1957) (plurality opinion).

269. *Id.* at 15–18; *accord id.* at 49 (Frankfurter, J., concurring in the result).

270. *Id.* at 17 (plurality opinion).

271. *Id.* at 17–18.

272. Cf. Graeme B. Dinwoodie, *Copyright Lawmaking Authority: An (Inter)Nationalist Perspective on the Treaty Clause*, 30 COLUM. J.L. & ARTS 355, 362–63 (2007) (arguing that copyright laws passed pursuant to the treaty powers are likely to be valid if they “seek[] to ensure domestic compliance with real international obligations” and are “adopted through a process involving real *political checks* on legislative lawmaking,” even if they do not comply with the IP Clause’s means); Timothy R. Holbrook, *The Treaty Power and the Patent Clause: Are There Limits on the United States’ Ability To Harmonize?*, 22 CARDOZO ARTS & ENT. L.J. 1, 4 (2004) (arguing that the IP Clause should not limit the Treaty Clause when the subject matter of a given treaty is international).

273. Dinwoodie, *supra* note 272, at 372.

powers in Article II, not Congress's powers in Article I, Section 8. It specifies a treaty-making process that involves the president and the Senate, not the whole Congress. As such, one might question whether the external limitations that the IP Clause imposes on Congress's other powers also restrict the treaty power, given that treaty-making is not a congressional power, even if the Senate is constitutionally integral to the process.

The question can be restated more generally: Does the IP Clause establish external limitations only on congressional legislation—as with the legislation passed under the Commerce Clause in *Missouri v. Holland*—or more broadly on federal governmental action, including the exercise of the treaty power—just as the Sixth Amendment created such a restriction in *Reid v. Covert*? The evidence set forth in Part I does not seem to shed light directly on the intersection between treaty-making and the IP Clause. Structurally speaking, the IP Clause—situated in Article I—might limit Congress's powers when the legislature acts bicamerally, but not the Article II treaty-making powers employed jointly by the president and the Senate.²⁷⁴ Although this structural analysis might seem formalistic, an exercise of the Article II treaty-making powers is designed to ensure that the president and Senate represent the country's interests broadly with regard to other countries, as compared with the more regionally grounded House of Representatives, which by design has a greater hand in Article I legislation.²⁷⁵ As Professor Dinwoodie notes, “[T]he values that lawmakers might need to pursue at the international level, or the means through which they might pursue them, might depart from those ends or means that are desirable domestically.”²⁷⁶

Still, the argument that the IP Clause does not limit treaties is not airtight. For one thing, if the argument is correct, then the federal government could easily circumvent the IP Clause's limitations through treaty-making instead of Article I legislation.²⁷⁷ Moreover, the

274. *Id.* at 381.

275. *Id.* at 379.

276. *Id.*

277. *See id.* at 378 (“[W]hat is the point of limits in one clause if these can easily be circumvented by reliance on another broader grant?”); Richard B. Graves III, *Globalization, Treaty Powers, and the Limits of the Intellectual Property Clause*, 50 J. COPYRIGHT SOC'Y U.S.A. 199, 210 (2003) (“[T]he federal government could enter into a treaty for the purpose of circumventing limitations on Congressional lawmaking authority. There is good reason to believe that the scope of the treaty enacted for this purpose would not be restricted to external matters.”).

historical evidence discussed in Part I shows that the IP Clause was believed in one circumstance to limit externally a power exercised under Article IV, beyond Article I.²⁷⁸ It might similarly limit a power exercised under Article II; but then, the Article II treaty power is granted to the president as well as to the Senate, whereas the Article IV power in that historical example was provided solely to Congress.

Furthermore, even if Article II self-executing treaties are not limited externally by the IP Clause, non-self-executing treaties might be so limited. Although both kinds of treaties are made pursuant to Article II,²⁷⁹ the former become law without any need for Congress to activate them via Article I,²⁸⁰ whereas the latter come into effect only if Congress uses Article I's Necessary and Proper Clause to enact appropriate legislation.²⁸¹ Therefore, one might argue that whenever Congress uses its Article I powers to implement non-self-executing treaties—the only powers it has at its disposal to do so—the IP Clause externally limits the legislature to the Clause's specified means.²⁸² The reasoning goes that whereas the non-self-executing treaty in *Holland* could be implemented via the Necessary and Proper Clause even though the Commerce Clause was unavailable, the same could not be said of the IP Clause, because unlike the Commerce Clause, the IP Clause externally limits the other Article I powers. This argument for different treatment, however, is weak, primarily because of the strange state of affairs that would result if Article II were to allow the United States to take on a treaty obligation that it could not then implement via Article I.

Regardless, my analysis suggests that good reasons exist to think that the IP Clause externally limits the government's power to enact treaty-like congressional-executive agreements. A congressional-executive agreement is an agreement negotiated by the president with one or more other countries, which is then adopted bicamerally by

278. See *supra* text accompanying notes 110–12.

279. Benjamin Beiter, Note, *Beyond Medellín: Reconsidering Federalism Limits on the Treaty Power*, 85 NOTRE DAME L. REV. 1163, 1194 n.206 (2010).

280. *Medellín v. Texas*, 128 S. Ct. 1346, 1356–57 (2008).

281. *Missouri v. Holland*, 252 U.S. 416, 432 (1920). Some scholars argue that *Holland* was wrongly decided and that Congress should be allowed to implement non-self-executing treaties pursuant only to Article I powers other than the Necessary and Proper Clause. E.g., Nicholas Quinn Rosenkranz, *Executing the Treaty Power*, 118 HARV. L. REV. 1867, 1880–92 (2005); Beiter, *supra* note 279, at 1194.

282. See *supra* Part III.

Congress like ordinary Article I legislation.²⁸³ Assuming that congressional-executive agreements are a constitutional form of lawmaking,²⁸⁴ they are enacted pursuant to Article I, Section 8 rather than Article II.²⁸⁵ As such, the accepted understanding is that these agreements are subject to Article I's limitations, even when Article II treaties are not.²⁸⁶ These agreements would thus be limited externally by the IP Clause to using the means provided in that Clause.

The predominant international agreements in intellectual property have been implemented bicamerally through Article I legislation, either because the underlying treaties were non-self-executing or because they were forms of congressional-executive agreement. For instance, the 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS),²⁸⁷ which sets minimum standards for intellectual-property laws, was implemented by the United States as a congressional-executive agreement.²⁸⁸ This Article's reasoning provides a strong case that the TRIPS agreement, having been enacted pursuant to Article I, is externally limited by the IP Clause.

The Berne Convention for the Protection of Literary and Artistic Works,²⁸⁹ which governs copyright law, is a non-self-executing treaty

283. Louis Henkin, *Treaties in a Constitutional Democracy*, 10 MICH. J. INT'L L. 406, 422 (1989).

284. Compare, e.g., Bruce Ackerman & David Golove, *Is NAFTA Constitutional?*, 108 HARV. L. REV. 799, 913–14 (1995) (arguing that they are), with Tribe, *supra* note 27, at 1249–51 (expressing skepticism).

285. Oona A. Hathaway, *Presidential Power over International Law: Restoring the Balance*, 119 YALE L.J. 140, 259–60, 261–63 (2009); John C. Yoo, *Laws as Treaties?: The Constitutionality of Congressional-Executive Agreements*, 99 MICH. L. REV. 757, 763–64 (2001).

286. See, e.g., John O. McGinnis, *Medellín and the Future of International Delegation*, 118 YALE L.J. 1712, 1747 (2009) (“[C]ongressional-executive agreements, dependent on Article I powers, are not interchangeable with treaties on matters reaching beyond the enumerated powers.”); Carlos Manuel Vázquez, *Treaties as Law of the Land: The Supremacy Clause and the Judicial Enforcement of Treaties*, 122 HARV. L. REV. 599, 691 n.397 (2008) (“The option of a congressional-executive agreement is unavailable for agreements that address matters beyond Congress’s legislative power under Article I.”).

287. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS Agreement].

288. Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (1994) (codified as amended in scattered sections of the U.S. Code); see also Memorandum for the United States Trade Representative, 58 Fed. Reg. 67,263, 67,267 (Dec. 20, 1993) (describing the president’s negotiations with Congress regarding the agreement).

289. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, S. TREATY DOC. NO. 99-27, 1161 U.N.T.S. 3 [hereinafter Berne Convention].

that the Senate ratified and Congress implemented in 1988.²⁹⁰ As just discussed, the arguments about whether congressional implementation of this non-self-executing treaty should be limited by the IP Clause's external limitations are weakly colorable.

In sum, the federal government's treaty powers and the IP Clause's external limits may collide. One would most expect a collision when Congress enacts a congressional-executive agreement; one would expect it less when Congress implements a non-self-executing treaty; and one would least expect it when the federal government enacts a self-executing treaty.

* * *

Although other powers might come into conflict with the IP Clause's external limits, the commerce, spending, necessary-and-proper, and treaty powers are those most likely to clash with them because those powers are broad and are responsible for much federal lawmaking. Each is capable of being invoked in ways that the IP Clause would seem to restrain.

This Part's analysis has mostly assumed that enacted laws have a singular purpose and that collisions between the IP Clause's external limitations and other constitutional powers take place when Congress uses those powers as a cover for promoting the progress of science and useful arts using means not authorized in the IP Clause. A nuanced analysis, however, allows for the possibility that Congress might have legitimate interests in enacting legislation in addition to promoting the progress of science and useful arts.²⁹¹ Many of these legitimate interests are likely to be pursuant to those powers just discussed that are likely to collide with the IP Clause's external limitations. In those instances, the presumption framework outlined in Section A should apply to permit Congress to enact legislation in spite of the IP Clause's external limitations, as long as clear and convincing evidence exists that Congress considered those other interests legitimate enough to override the IP Clause's external limitations. As a practical matter, this framework might enable Congress to bypass the IP Clause's external limitations whenever it wants merely by giving lip service to other more permissive

290. Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, § 2, 102 Stat. 2853, 2853 (codified at 17 U.S.C. § 101 note (2006)).

291. *See supra* Part II.A.

constitutional powers, such as the Commerce Clause or the treaty powers, to override the IP Clause's limited means. This situation might sometimes happen, as unfortunate as it may be. There is perhaps no better solution, however, given the recognition that Congress might have truly legitimate trade, foreign-relations, or other interests in enacting laws with the IP Clause's ends that extend beyond its means. At worst, the presumption framework would force Congress to consider clearly—and one would hope carefully—whether it is transgressing the IP Clause's important external limitations. Moreover, because the presumption would be extremely difficult to overcome for laws whose means subvert the IP Clause's means, those laws would be less likely to be deemed to be constitutional.

Bearing this general analysis in mind, I now turn to an exploration of some existing federal laws that might be unconstitutional in light of the foregoing analysis.

III. UNCONSTITUTIONAL FEDERAL LAWS?

For most of the nation's history, few federal laws were passed that might even questionably transgress the limited means specified in the IP Clause. Whatever the cause—be it globalization, an expansive Commerce Clause, or recklessness—starting in the late twentieth century, Congress proposed or enacted a number of federal laws of dubious constitutionality in light of the IP Clause's external limitations.²⁹² This Part explores some of those laws—trade-secrecy, antibootlegging, copyright-restoration, and database-protection—analyzing their constitutionality in light of the analytical framework proposed in Part II. This Part also investigates the constitutionality of federal laws establishing the federal funding of scientific and artistic works. As the analysis in this Part demonstrates, the framework proposed by this Article is straightforward in its application. Even when the conclusion to be drawn is not obvious, use of the framework focuses and sharpens the analysis.

A. *Trade Secrecy*

This Section describes Congress's legislation protecting trade secrets from misappropriation. I show that this law has a strong

292. Cf. Heald & Sherry, *supra* note 18, at 1168 n.359 (observing that the earlier absence of questionable laws “might itself be evidence of the unconstitutionality of such statutes”).

structural purpose of promoting the progress of science and useful arts, but that it does not comply with the IP Clause's limited means. Moreover, although the law also has a weighty legitimate purpose of promoting trade and interstate commerce, Congress did not leave clear evidence that it thought commerce interests ought to take precedence over the IP Clause's external limitations. As such, the legislation is constitutionally problematic. Given that President Obama's Justice Department has called for greater use of this law in prosecuting trade-secret misappropriation,²⁹³ its constitutional status is ever more important.

In 1996, Congress passed the Economic Espionage Act,²⁹⁴ providing the first general federal protection for trade secrecy.²⁹⁵ Among other things, it provides that

[w]hoever, with intent to convert a trade secret, that is related to or included in a product that is produced for or placed in interstate or foreign commerce, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of that trade secret, knowingly . . . [misappropriates] shall . . . be fined under this title or imprisoned not more than 10 years, or both.²⁹⁶

The law defines trade secrets as

all forms and types of financial, business, scientific, technical, economic, or engineering information . . . if— (A) the owner thereof has taken reasonable measures to keep such information secret; and (B) the information derives independent economic value . . . from not being generally known to, and not being readily ascertainable through proper means by, the public.²⁹⁷

The Senate report on the bill explains that this law has two purposes: “to promote the development and lawful utilization of United States proprietary economic information produced for, or

293. Gary G. Grindler, *Aggressive IP Enforcement Is a Must*, NAT'L L.J. (May 3, 2010), <http://www.law.com/jsp/nlj/PubArticleNLJ.jsp?id=1202453202819>. At the time he wrote this article, Gary Grindler was the acting deputy attorney general and chairman of the Department of Justice's Task Force on Intellectual Property. *Id.*

294. Economic Espionage Act of 1996, Pub. L. No. 104-294, 110 Stat. 3488 (codified at 18 U.S.C. §§ 1831–1839 (2006)).

295. Other federal laws protect trade secrets narrowly and for different purposes, such as to guard against federal employees' unauthorized disclosure of certain confidential information. *E.g.*, 18 U.S.C. § 1905 (2006).

296. 18 U.S.C. § 1832(a) (2006).

297. *Id.* § 1839(3).

placed in, interstate and foreign commerce by protecting it from . . . misappropriation” and “to secure to authors and inventors the exclusive right to their respective writings and discoveries.”²⁹⁸ The first purpose corresponds with Congress’s power under the Commerce Clause, and the second corresponds with Congress’s power under the IP Clause.²⁹⁹ The report explains further that

Congress has heretofore confined its protection of intellectual property to patented and copyrighted material. With this legislation, Congress extends the protection of Federal law to the equally important area of proprietary economic information. During the course of the Committee’s hearings, we documented that proprietary economic information is vital to the prosperity of the American economy, that it is increasingly the target of thieves, and that our current laws are inadequate to punish people who steal the information.³⁰⁰

As the report confirms, then, with the Economic Espionage Act, the Senate expressly set out to protect a broader swath of material in a manner akin to Congress’s protection of patentable and copyrightable material. Although the law is primarily occupied with promoting the country’s economic status, it is also focused on safeguarding information that might otherwise be protected by existing copyright and patent law.³⁰¹

The Economic Espionage Act comports with a general understanding of trade-secret laws’ purposes. As the Supreme Court has reasoned, along with “maintenance of standards of commercial ethics,” a primary purpose of trade-secrecy protection is “the encouragement of invention.”³⁰² Scholars emphasize trade secrecy’s important role in fostering scientific and technological innovation.³⁰³ Like patent law, trade-secrecy protection encourages investment in scientific and technological research by “giv[ing] the developer of new and valuable information the right to restrict others from using it,

298. S. REP. NO. 104-359, at 2 (1996).

299. *Id.* at 4.

300. *Id.* at 5–6.

301. *Id.* at 14.

302. *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 481 (1974).

303. *E.g.*, Mark A. Lemley, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311, 329–32 (2008).

and therefore the prospect of deriving supracompetitive profits from the information.”³⁰⁴

This discussion indicates that the law’s structural effects are to protect economic development and to promote the progress of science and useful arts. As to the former effect, the law protects many things that are primarily helpful in facilitating commerce, such as customer lists and customer research.³⁰⁵ As to the latter, it promotes the progress of science and useful arts by encouraging investment in scientific and technological research because it authorizes punishment for those who misappropriate such information.³⁰⁶ In fact, nearly every reported judicial opinion resulting from a prosecution under this law seems to involve this latter variety of trade secret, the variety whose protection is intended to promote the progress of science and useful arts.³⁰⁷ Although courts and commentators have debated whether trade-secrecy protection interferes with patent law’s operation,³⁰⁸ few dispute that the two regimes have, in large part, the same aim: the constitutional end laid out in the IP Clause of promoting the progress of science and useful arts. As such, to the extent that the law is protecting scientific and technological information from misappropriation, it must comply with the IP Clause’s specified

304. *Id.* at 330.

305. *See* 18 U.S.C. § 1839(3) (2006) (protecting “financial, business, [or] economic . . . information”).

306. *See id.* (protecting “scientific, technical, . . . or engineering information”).

307. *See e.g.*, *United States v. Yang*, 281 F.3d 534, 540–44 (6th Cir. 2002) (scientific information about adhesives research); *United States v. Krumrei*, 258 F.3d 535, 536–37 (6th Cir. 2001) (“new process for applying hard coatings to the laminate contact surfaces of caul plates”); *United States v. Martin*, 228 F.3d 1, 8–10 (1st Cir. 2000) (composition of veterinary diagnostic tests and research-and-development data); *United States v. Hsu*, 155 F.3d 189, 191–92 (3d Cir. 1998) (“processes, methods, and formulas for manufacturing Taxol, an anti-cancer drug”); *United States v. Aleynikov*, 737 F. Supp. 2d 173, 174 (S.D.N.Y. 2010) (“computer programs used to operate [a financial firm’s] high-frequency trading system”); *United States v. Genovese*, 409 F. Supp. 2d 253, 255 (S.D.N.Y. 2005) (source code).

308. *Compare* *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 166 (1989) (concluding that state unfair-competition and trade-secret laws are not inconsistent with patent law), *and* *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 474–93 (1974) (distinguishing between the federal exclusivity of the IP Clause and states’ ability to protect trade secrets and intellectual property), *with* Jeanne C. Fromer, *Trade Secrecy in Willy Wonka’s Chocolate Factory*, in *THE LAW AND THEORY OF TRADE SECRECY: A HANDBOOK OF CONTEMPORARY RESEARCH* 3, 6 (Rochelle C. Dreyfuss & Katherine J. Strandburg eds., 2011) (describing how the “central innovations in the candy industry” are protected by trade secrecy even when patent protection might be obtained), *and* Daniel C. Munson, *The Patent-Trade Secret Decision: An Industrial Perspective*, 78 J. PAT. & TRADEMARK OFF. SOC’Y 689, 708 (1996) (noting that industrialists often prefer trade secrets, which “encompass some of the most valuable intellectual property”).

means unless clear and convincing evidence exists that commerce interests superseded the IP Clause's external limitations.

Federal trade-secrecy law does not confine itself to the Clause's means. Putting aside the issue of whether the law's criminal and injunctive relief confer exclusive rights on inventors³⁰⁹ as the IP Clause requires, the law provides protection of potentially unlimited duration. As long as the holder of a trade secret complies with the law's secrecy requirements and as long as a third party does not uncover the secret by proper means, such as independent discovery or reverse engineering, the law's protection endures.³¹⁰ Because one can conceive of scenarios involving protected trade secrets in which protection would not endure for "limited Times," the law contravenes the IP Clause's prescribed means. Moreover, there is no evidence that Congress deliberately chose to contravene the IP Clause's means to protect weightier commercial interests, suggesting that the presumption of unconstitutionality is not overcome here.³¹¹

By contrast, former Professor Patry argues that federal trade-secrecy laws are not constitutionally problematic under the IP Clause.³¹² Patry asserts that the purpose of trade-secrecy laws is distinct from that of patent and copyright laws: the goal of the former is to protect against industrial espionage, whereas the goal of the latter is to advance knowledge and technology.³¹³ In Patry's view, trade-secret laws do not protect "Writings" per se but rather protect

309. Professors Paul Heald and Suzanna Sherry think that federal trade-secrecy laws are constitutional. Heald & Sherry, *supra* note 18, at 1194–95. They also reason that the Economic Espionage Act does not establish exclusive rights, but rather merely supplements existing common-law remedies, and therefore does not fall within the ambit of the IP Clause's limitations. *Id.* Yet if Professors Heald and Sherry are correct that trade-secrecy protection is not an exclusive right, then that premise supplies all the more reason for concluding that the law transgresses the IP Clause's limited means of promoting innovation.

310. See Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 YALE L.J. 1590, 1622 (2011) ("[T]rade secrecy protection can theoretically provide even more powerful incentives than patents because trade secrecy rights are potentially infinite in duration."); David S. Levine, *Secrecy and Unaccountability: Trade Secrets in Our Public Infrastructure*, 59 FLA. L. REV. 135, 156–57 (2007) ("So long as the elements of trade secrecy are met, the right to keep a secret for an infinite period of time underscores the real power of enjoying trade secret protection.").

311. Congress is less likely to provide this clear evidence absent an adopted framework encouraging it to do so. *Cf.* *United States v. Lopez*, 514 U.S. 549, 561–63 (1995) (encouraging Congress to make express findings supporting a law's link to interstate commerce by underscoring the findings' relevance to a determination whether Congress acted permissibly within its commerce power).

312. Patry, *supra* note 17, at 394.

313. *Id.*

the right to be free from theft, especially because material that is reverse engineered—and thus that is available to the public without misappropriation—is not protectable as a trade secret.³¹⁴ Because, according to Patry, these laws do not protect the secrets themselves so much as they protect this more abstract right to be free from theft, they are not within the reach of the IP Clause's limitations and are thus constitutionally unproblematic.³¹⁵

This analysis is insufficiently nuanced. Trade-secrecy protection surely seeks to protect against industrial espionage, but the statute's structural purpose also includes the goal of advancing knowledge and technology. As such, my framework turns the analysis of former Professor Patry on its head: if Patry is correct that the trade-secret statute does not protect "Writings," then as a law aimed at promoting the progress of science and useful arts, it actually complies with one *fewer* of the IP Clause's means. Thus, on former Professor Patry's theory, trade-secret laws are constitutionally problematic for an additional reason.

In sum, Congress's incursion into trade-secret protection with the Economic Espionage Act is constitutionally problematic. The statute has a strong structural purpose of promoting the progress of science and useful arts, but it exceeds the IP Clause's means. To the extent that Congress attempts to promote the IP Clause's goals, it cannot use its other more expansive powers, such as its power under the Commerce Clause, to protect information that promotes the progress of science and useful arts without making a clear decision to supersede the IP Clause's means because of prevalent commerce interests. By contrast, Congress's protection of other information, such as customer lists, is not constitutionally problematic because that protection is about promoting commerce, not promoting the progress of science and useful arts.

B. Antibootlegging

Another provision of doubtful constitutionality is the federal antibootlegging provision. In 1994, Congress enacted this provision in the Uruguay Round Agreement Act (URAA),³¹⁶ which implemented aspects of a number of multilateral trade agreements, including

314. *Id.* (internal quotation marks omitted).

315. *Id.*

316. Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (1994) (codified as amended in scattered sections of the U.S. Code).

TRIPS, a treaty concerned with intellectual property.³¹⁷ The TRIPS agreement requires member countries to establish minimum standards for copyright, patent, trademark, and other intellectual-property laws.³¹⁸ Among these standards is the ability of performers to prevent unauthorized “fixation of their unfixed performance and the reproduction of such fixation.”³¹⁹

Pursuant to TRIPS, Congress implemented the first federal antbootlegging protection by enacting the URAA. According to this provision,

[a]nyone who, without the consent of the performer or performers involved—

- (1) fixes the sounds or sounds and images of a live musical performance in a copy or phonorecord, or reproduces copies or phonorecords of such a performance from an unauthorized fixation,
- (2) transmits or otherwise communicates to the public the sounds or sounds and images of a live musical performance, or
- (3) distributes or offers to distribute, sells or offers to sell, rents or offers to rent, or traffics in any copy or phonorecord fixed as described in paragraph (1), . . .

shall be subject to the remedies provided in sections 502 through 505, to the same extent as an infringer of copyright.³²⁰

The remedies mentioned in this provision include injunctions, impoundment, and damages.³²¹ The URAA also includes a parallel criminal provision authorizing possible fines, a prison term of up to ten years, forfeiture, and destruction of the recordings.³²²

The criminal provision’s constitutionality has been challenged in prosecutions under the provision. Challengers have alleged that Congress, in enacting the URAA, impermissibly employed means

317. See *supra* text accompanying notes 287–88.

318. TRIPS Agreement, *supra* note 287, pt. II.

319. *Id.* art. 14(1). The earlier Berne Convention permitted countries to provide copyright protection to unfixed works but did not require them to do so. Berne Convention, *supra* note 289, art. 2, paras. 1–2. The United States acceded to the convention without providing such protection. Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (codified as amended in scattered sections of 17 U.S.C.).

320. 17 U.S.C. § 1101(a) (2006).

321. *Id.* §§ 502–504.

322. 18 U.S.C. § 2319A (2006).

beyond the limited ones specified in the IP Clause. They have claimed both that the law provides protection for performances that are not “Writings” and that the protection is perpetual, no durational provision having been included in the law.³²³ Each final court that has considered a constitutional challenge has rejected it, reasoning that Congress had the authority to enact the law under the Commerce Clause, even if the IP Clause does not authorize the means employed.³²⁴

This Section argues that in light of the IP Clause’s external limitations, these courts were too quick to reject the constitutional challenges.

The structural purpose of the URAA’s antbootlegging provision is indubitably the promotion of the progress of science and useful arts. For one thing, when Congress enacted this law, it labeled both the civil and criminal laws as “[c]opyright [p]rovisions.”³²⁵ The Senate Committee on the Judiciary that helped craft the implementation of TRIPS stated that it was doing so “to safeguard intellectual property rights.”³²⁶ Congress chose to place the civil provision in Title 17 of the U.S. Code with extant copyright law.³²⁷ The civil remedies the law authorizes are incorporated from existing copyright laws.³²⁸

The antbootlegging provision thus seems to have been enacted pursuant to the IP Clause. The civil provision of the Act makes no mention of commerce,³²⁹ and it was not enacted pursuant to the Article II treaty power. Because TRIPS is a congressional-executive agreement, the antbootlegging provision therefore must have been enacted pursuant to some Article I power, presumably the IP

323. *United States v. Martignon*, 492 F.3d 140 (2d Cir. 2007); *United States v. Moghadam*, 175 F.3d 1269 (11th Cir. 1999); *KISS Catalog, Ltd. v. Passport Int’l Prods., Inc.*, 405 F. Supp. 2d 1169 (C.D. Cal. 2005).

324. *Martignon*, 492 F.3d at 149–52; *Moghadam*, 175 F.3d at 1280; *KISS Catalog*, 405 F. Supp. 2d at 1172–74.

325. Uruguay Round Agreements Act, Pub. L. No. 103-465, tit. V, subtit. A, 108 Stat. 4809, 4974 (1994).

326. S. REP. NO. 103-412, at 224 (1994); *cf. Moghadam*, 175 F.3d at 1276 (“The specific context in which [the law] was enacted involved a treaty with foreign nations, called for by the World Trade Organization, whose purpose was to ensure uniform recognition and treatment of intellectual property in international commerce.”).

327. Uruguay Round Agreements Act § 512, 108 Stat. at 4974 (codified as amended at 17 U.S.C. § 1101 (2006)).

328. *See supra* text accompanying notes 320–21.

329. *Martignon*, 492 F.3d at 143.

Clause.³³⁰ The provision, however, does not comply with the IP Clause's limited means, both because it protects unfixed works and because it lacks a durational provision to limit the protection.

The IP Clause enables Congress to grant exclusive rights to authors in their "Writings."³³¹ Given that the first federal copyright law, passed in 1790, provided copyright protection just to books, maps, and charts,³³² later observers had some difficulty determining how broadly the term "Writings" should be construed.³³³ The Supreme Court ruled that the term was not limited strictly to textual materials when it decided that a photograph of Oscar Wilde was a copyrightable "Writing[]." ³³⁴ In so doing, the Court construed "Writings" beyond the term's colloquial understanding. It reasoned that photographs constitute "Writings" "so far as they are representatives of original intellectual conceptions of the author."³³⁵ In another case, the Court reasoned more generally that "'Writings' . . . [are not] construed in their narrow literal sense but, rather, with the reach necessary to reflect the broad scope of constitutional principles."³³⁶ In the same decision, the Supreme Court held that "recordings of artistic performances" constitute writings, even though they are not visually perceptible.³³⁷ The Court reasoned that recordings are "physical rendering[s] of the fruits of creative intellectual or aesthetic labor."³³⁸ Although it did not expressly say so, the Court suggested that "Writings" must be physical renderings; by implication, performances that are not physically rendered—and thus that are not fixed—cannot be "Writings."³³⁹

330. *See supra* Part II.B.4.

331. U.S. CONST. art. I, § 8, cl. 8.

332. Act of May 31, 1790, ch. 15, 1 Stat. 124 (repealed 1802).

333. *Cf. Schwartz & Treanor, supra* note 42, at 2387 ("[P]rotection for maps and charts reflects a nonliteral reading of the Copyright Clause.").

334. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 56–60 (1884).

335. *Id.* at 58.

336. *Goldstein v. California*, 412 U.S. 546, 561 (1973).

337. *Id.* at 561–62.

338. *Id.* at 561.

339. *Cf. id.* ("[A]lthough the word 'writings' might be limited to script or printed material, it may be interpreted to include any physical rendering of the fruits of creative intellectual or aesthetic labor."); *Kalem Co. v. Harper Bros.*, 222 U.S. 55, 63 (1911) (suggesting that "Writings" does not include ideas, which are distinct from "the words in which those ideas are clothed"). In ruling on whether the term "Writings" embodied a constitutional requirement of originality, the Court relayed Congress's observation that "[t]he two fundamental criteria of copyright protection [are] originality and fixation." *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340,

Most scholars are persuaded that unfixed performances lie outside the scope of “Writings.”³⁴⁰ Professor David Nimmer reasons that “[i]f the word ‘writings’ is to be given any meaning whatsoever, it must, at the very least, denote some material form, capable of identification and having a more or less permanent endurance.”³⁴¹ Moreover, federal copyright laws, from the earliest to the more modern versions, have not protected unfixed works.³⁴² In fact, proposals to confer copyright protection on unfixed works have been met with staunch criticism that such works are impermissibly intangible.³⁴³ The consistent decision not to protect unfixed works, combined with the term “Writings” in the IP Clause, strongly suggests that only fixed works are “Writings.”³⁴⁴

Fixation can be regarded as an integral prerequisite to copyright protection for a number of reasons. First, the benefits society receives from artistic works’ being created and eventually moved into the public domain are unlikely to happen without fixation. Fixation ensures that cultural creations remain available for public use long after their creation.³⁴⁵ Second, fixation can help as an evidentiary matter by delineating precisely a work’s expression, so that it cannot later be disputed in an infringement claim.³⁴⁶

That said, a minority of scholars think that “Writings” can encompass unfixed works. Some reason that once “Writings” is read nonliterally, as the Supreme Court has read it, no reason remains to

355 (1991) (second alteration in original) (quoting H.R. REP. NO. 94-1476, at 51 (1976); S. REP. NO. 94-473, at 50 (1975)).

340. *E.g.*, 1 NIMMER & NIMMER, *supra* note 28, § 1.08[C][2]; Larissa Mann, *If It Ain’t Broke . . . Copyright’s Fixation Requirement and Cultural Citizenship*, 34 COLUM. J.L. & ARTS 201, 202 & n.3 (2011).

341. 1 NIMMER & NIMMER, *supra* note 28, § 1.08[C][2] (internal quotation marks omitted).

342. *See* Merschman, *supra* note 43, at 682 (noting “Congress’s continuous precedent of protecting only fixed works for more than two centuries”).

343. *See, e.g.*, Laura A. Heymann, *How To Write a Life: Some Thoughts on Fixation and the Copyright/Privacy Divide*, 51 WM. & MARY L. REV. 825, 845 (2009) (“[P]roposals [to extend copyright protection to the efforts of performers] were met with opposition by, for example, the Committee on Copyrights of the American Bar Association based on its ‘attempt to protect performing rights of an intangible nature.’” (quoting Everett N. Curtis, Otto F. Barthel, Louis Charles Smith & George P. Dike, *Report of the Committee on Copyrights*, 1937 A.B.A. SEC. PAT. TRADE-MARK & COPYRIGHT L. REP. 11, 12–13)).

344. *See id.* at 852 (“If ‘writings’ is interpreted as meaning, at the very least, something in tangible form, one might conclude that Congress could not constitutionally extend copyright protection to unfixed works . . .”).

345. Merschman, *supra* note 43, at 663–64.

346. *See id.* at 683 (“[T]he evidentiary role that fixation plays in the copyright system is fundamental to preserving the expression/idea dichotomy.”).

insist on a distinction between fixed and unfixed works.³⁴⁷ The reasoning advanced by Professor Nimmer, however, suggests otherwise.³⁴⁸ Others respond that an unfixed performative work “clearly is a physical rendering of the fruits of aesthetic labor” because it “is capable of being perceived, reproduced, or otherwise communicated” through a performance.³⁴⁹ That observation is true enough, but unfixed performances are unlike the various works the Court has found to constitute “Writings,” and the Court has hinted that they do not belong to the same class.

If the majority’s analysis is correct, then live performances—protected by the antibootlegging provision of the URAA—are not “Writings.”³⁵⁰ As such, the antibootlegging provision is not in compliance with the IP Clause’s external limitations because it seeks to promote the progress of science and useful arts without confining itself to the IP Clause’s prescribed means.

Another reason exists to doubt the law’s constitutionality: it lacks a provision limiting the duration of protection.³⁵¹ Absent a court’s reading such a provision into the law, live musical performances could be protected eternally from bootlegging. Although some commentators suggest that copyright’s durational limitation ought to be incorporated into the antibootlegging law,³⁵² courts have been hesitant to do so.³⁵³

347. See, e.g., 3 PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 17.6.1 (3d ed. 2005) (“There is little doubt that the performances subject to protection are ‘writings’ in the constitutional sense for, beyond literalism, there is nothing in the mechanical act of fixation to distinguish writings from nonwritings.”); Heymann, *supra* note 343, at 856 (“[T]here is no defensible reason to restrict [copyright] protection to fixed works . . .”).

348. See *supra* note 341 and accompanying text.

349. Leslie Erin Wallis, Comment, *The Different Art: Choreography and Copyright*, 33 UCLA L. REV. 1442, 1461, 1466 (1986); see also Roberta Rosenthal Kwall, *Preserving Personality and Reputational Interests of Constructed Personas Through Moral Rights: A Blueprint for the Twenty-First Century*, 2001 U. ILL. L. REV. 151, 164 n.100 (citing Wallis, *supra*, at 1461, 1466).

350. See generally Dotan Oliar, *Resolving Conflicts Among Congress’s Powers Regarding Statutes’ Constitutionality: The Case of Anti-Bootlegging Statutes*, 30 COLUM. J.L. & ARTS 467, 489–91 (2007) (discussing this view).

351. See *id.* at 491–92 (“The overwhelming majority of courts and commentators suggest that the anti-bootlegging statutes violate the limited times requirement.”).

352. E.g., Angela T. Howe, United States v. Martignon & KISS Catalog v. Passport International Products: *The Anti-Bootlegging Statute and the Collision of International Intellectual Property Law and the United States Constitution*, 20 BERKELEY TECH. L.J. 829, 851 (2005).

353. See, e.g., United States v. Moghadam, 175 F.3d 1269, 1274 n.9 (11th Cir. 1999) (“We note that the anti-bootlegging statute may be faced with another constitutional problem under

Because the antibootlegging provision regulates works that are likely not “Writings,” because it lacks any durational limitation, and because the structural purpose of the law is to promote the progress of science and useful arts, the provision is of dubious constitutionality. Moreover, it cannot overcome any presumption against constitutionality because there is no clear and convincing evidence that Congress intended another legitimate constitutional interest to take precedence and thereby supersede the IP Clause’s external limitations. The federal government’s attempt to classify this law *ex post* as an exercise of Congress’s power under the Commerce Clause³⁵⁴ does nothing to change the fact that the actual and only structural purpose reflected in the law is to promote the progress of science and useful arts.

C. *Copyright Restoration*

Another law that raises constitutional doubts is the copyright-restoration provision Congress passed in 1994, also in the URAA.³⁵⁵ The law restored copyright protection for certain foreign works that had fallen into the public domain in the United States—due, among other things, to “lack of national eligibility” or “noncompliance with formalities imposed at any time by United States copyright law”—but whose copyrights had not yet expired in the creators’ home countries.³⁵⁶ Included among the works whose copyrights were so restored were “films by Alfred Hitchcock and Federico Fellini, books by C.S. Lewis and Virginia Woolf, symphonies by Prokofiev and Stravinsky and paintings by Picasso.”³⁵⁷ The Berne Convention requires copyright restoration,³⁵⁸ but Congress did not comply with this requirement when it acceded to Berne in 1989. Then, the TRIPS

the Copyright Clause. . . . [W]e decline to address the argument in light of our disposition of this case.”); *KISS Catalog, Ltd. v. Passport Int’l Prods., Inc.*, 405 F. Supp. 2d 1169, 1172 n.7 (C.D. Cal. 2005) (“Because the United States agreed that the durational limitation of 17 U.S.C. § 302 cannot be incorporated into the Statute, the Court assumes, without deciding, that it is not incorporated.”).

354. *United States v. Martignon*, 492 F.3d 140, 144–45 (2d Cir. 2007); *Moghadam*, 175 F.3d at 1274–75; *KISS Catalog*, 405 F. Supp. 2d at 1172.

355. Uruguay Round Agreements Act, Pub. L. No. 103-465, § 504, 108 Stat. 4809, 4976–81 (1994) (codified as amended at 17 U.S.C. §§ 104A, 109(a) (2006)).

356. *Id.*

357. Adam Liptak, *Once in the Public’s Hands, Now Back in Picasso’s*, N.Y. TIMES, Mar. 22, 2011, at A17.

358. Berne Convention, *supra* note 289, art. 18.

agreement required signatories to implement this Berne provision.³⁵⁹ Only when Congress implemented parts of TRIPS did it provide for copyright restoration for foreign works.

In *Golan v. Holder*,³⁶⁰ this provision was challenged on the ground that restoring the copyrights to works that have entered the public domain violates the IP Clause's constraints.³⁶¹ It was also challenged as a violation of the First Amendment,³⁶² an issue I do not take up here. The Tenth Circuit rejected the constitutional challenge.³⁶³ As for the IP Clause, the court reasoned that "the decision to comply with the Berne Convention, which secures copyright protections for American works abroad, [was not] so irrational or so unrelated to the aims of the Copyright Clause that it exceed[ed] the reach of congressional power."³⁶⁴ In a similar, earlier challenge to the legislation's constitutionality, the D.C. Circuit also upheld the provision, reasoning that the IP Clause does not limit Congress from authorizing protection for material in the public domain.³⁶⁵ The Supreme Court agreed with both circuit court rulings and upheld Congress's authority to enact this law pursuant to the IP Clause.³⁶⁶

Congress's interests in enacting this legislation seemed to be both complying with international obligations and promoting the progress of science and useful arts. The federal government asserted that it had three interests in enacting the law: "(1) attaining indisputable compliance with international treaties and multilateral agreements, (2) obtaining legal protections for American copyright holders' interests abroad, and (3) remedying past inequities of foreign authors who lost or never obtained copyrights in the United States."³⁶⁷ The

359. TRIPS Agreement, *supra* note 287, art. 9(1).

360. *Golan v. Holder* (*Golan III*), 132 S. Ct. 873 (2012).

361. *See id.* at 878 ("Petitioners . . . maintain that [under] the Constitution's Copyright and Patent Clause, . . . a work that has entered the public domain, for whatever reason, must forever remain there.").

362. *Id.*

363. *Golan v. Holder* (*Golan II*), 609 F.3d 1076, 1094 (10th Cir. 2010), *aff'd*, 132 S. Ct. 873 (2012); *Golan v. Gonzales* (*Golan I*), 501 F.3d 1179, 1186–87 (10th Cir. 2007).

364. *Golan I*, 501 F.3d at 1187.

365. *Luck's Music Library, Inc. v. Gonzales*, 407 F.3d 1262, 1263–65 (D.C. Cir. 2005).

366. *Golan III*, 132 S. Ct. at 889.

367. *Golan II*, 609 F.3d at 1083. The Supreme Court accepted the first reason—maintaining good foreign relations—by pointing to the Mexican, Thai, Russian, and other criticism of the United States' prior inaction to restore copyrights as Congress later did and an American desire

first interest was compliance with international obligations, whereas the next two were promoting the progress of science and useful arts: the former by giving greater incentive to American authors to create and the latter by giving an incentive to foreign authors to develop and market their works.

Because Congress passed the law to comply with TRIPS, one might suggest that it was thus using an Article I power—presumably the IP Clause—as its source of authority for implementing a congressional-executive agreement. Yet the story is more complicated than that because TRIPS required the United States to comply with the Berne Convention on copyright restoration.³⁶⁸ The United States acceded to Berne pursuant to its Article II treaty-making power.³⁶⁹ Therefore, as an alternative to legislating under the IP Clause, by implementing copyright restoration pursuant to TRIPS, Congress may have been using the Necessary and Proper Clause.³⁷⁰ As discussed in Part II.B.4, although a case might be made that Article II treaties, particularly non-self-executing ones, need to comply with the IP Clause’s external limitations, one could mount a respectable argument that they do not.³⁷¹

To the extent that the IP Clause limits the means that Congress may employ in this context, Congress’s passage of the copyright-restoration provision within the URAA might seem to exceed the means authorized by the Clause. In fact, the law’s challengers argue that extending copyright restoration to works already in the public domain violates the IP Clause’s “limited Times” restriction.³⁷² These challengers assert that once a work has moved into the public domain, its limited time of protection is at an end and cannot be restored.³⁷³ The Supreme Court, however, rejected this argument, effectively reasoning that a one-time restoration of copyrights to some works for

to avoid a trade-enforcement proceeding in the World Trade Organization on that basis. *Golan III*, 132 S. Ct. at 880–82.

368. See *supra* text accompanying note 359.

369. See *supra* Part II.B.4.

370. This argument is weakened by Congress’s 1988 statements that the legislature did not need to implement copyright restoration to comply with the Berne Convention. See THE URUGUAY ROUND AGREEMENTS ACT: STATEMENT OF ADMINISTRATIVE ACTION 323, reprinted in H.R. DOC. NO. 103-316, at 656, 992 (1994) (“Before the United States adhered to the Berne Convention in 1989, Congress determined that the United States was in compliance with Article 18 of the Convention . . .”).

371. See *supra* Part II.B.4.

372. E.g., *Golan I*, 501 F.3d 1179, 1186 (10th Cir. 2007).

373. *Golan III*, 132 S. Ct. 873, 878 (2012).

a finite time is well within Congress's power to confer rights in intellectual property for limited times.³⁷⁴

By interpreting the “limited Times” provision as it did,³⁷⁵ the Supreme Court avoided—and perhaps consciously ducked—having to address whether and how the IP Clause's external limitations tie Congress's hands and prevent it from restoring copyright protection to works that have already fallen into the public domain.

D. Database Protection

Legislation involving database protection is another area of statutory law that raises constitutional uncertainty. As of 2012, Congress had not yet passed into law any such protection, but many bills had been introduced on the topic in the preceding years. In 1991, the Supreme Court cast doubt on the possibility of using copyright law broadly to protect information databases. The Court ruled that databases constitutionally fall within the purview of the copyright laws only when the database compiler for whom the protection is intended “chooses which facts to include, in what order to place them, and how to arrange the collected data so that they may be used effectively by readers . . . so long as [the choices] are made independently by the compiler and entail a minimal degree of creativity.”³⁷⁶ Absent such conditions, protection for databases

374. *Id.* at 884.

375. Another possible interpretation of the provision was colorable. The historical evidence on the precise definition of “limited Times” in this context is scant, *Golan I*, 501 F.3d at 1190–91, and before *Golan III*, the Supreme Court had not ruled on it. It had stated in other contexts, however, that the precise point of copyright and patent laws enacted pursuant to the IP Clause is to ensure that the protected works will fall into the public domain for others to use freely. *E.g.*, *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 151 (1989); *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975); *Graham v. John Deere Co.*, 383 U.S. 1, 5–6 (1966). Moreover, in preemption decisions analyzing whether states could protect works that had fallen into the public domain, the Court had reasoned that “that which is in the public domain cannot be removed therefrom by action of the States.” *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 481 (1974); *accord* *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237 (1964) (“[W]hen an article is unprotected by a patent or a copyright, state law may not forbid others to copy that article.”). Implied in this reasoning was the notion that part and parcel of the authority to grant exclusive rights for limited times is a concurrent lack of authority to regulate once that time has expired. For a related discussion of former Professor Patry's argument that the IP Clause contains both positive and negative rights, see *supra* text accompanying notes 180–83.

376. *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 348 (1991).

transgresses the “Authors” and “Writings” requirements of the IP Clause.³⁷⁷

After this decision, Congress proposed various bills to protect databases more comprehensively, although none of them passed into law.³⁷⁸ Those bills relied on the Commerce Clause for their authority³⁷⁹ because the IP Clause had been ruled off-limits for noncreative databases. The remaining question is whether even that reliance on the Commerce Clause was permissible in light of the IP Clause’s external limitations.

Scholarship on the constitutional question is divided. For example, Professors Heald and Sherry think that legislation protecting databases is constitutionally problematic because “facts have historically been considered to form a critical part of the public domain, available for anyone to use.”³⁸⁰ Professor Pollack, however, thinks that database protection is constitutional under the Commerce Clause as long as it is limited to cases of market failure.³⁸¹

Much of this debate implicitly centers on whether the structural purpose of database-protection laws is promoting the progress of science and useful arts or fostering interstate commerce. If their purpose is only the former, the laws must comply with the IP Clause’s

377. See *id.* at 346 (explaining that the Supreme Court has “made it unmistakably clear” that “the crucial terms ‘authors’ and ‘writings’” both “presuppose a degree of originality”). *But cf.* Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1867 (1990) (using history to show that early copyright law protected “works of little personal authorship yet considerable expenditure of labor and capital”).

378. See, e.g., Database and Collections of Information Misappropriation Act, H.R. 3261, 108th Cong. (2003) (proposing the “prohibit[ion of] the misappropriation of certain databases”); Database Investment and Intellectual Property Antipiracy Act of 1996, H.R. 3531, 104th Cong. (1996) (proposing a statutory amendment “to promote investment and prevent intellectual property piracy with respect to databases”). See generally Samuel E. Trosow, *Sui Generis Database Legislation: A Critical Analysis*, 7 YALE J.L. & TECH. 534, 573–625 (2005) (reviewing various unsuccessful proposals for “*sui generis* database legislation” that have come up before “the U.S. Congress and at the World Intellectual Property Organization (WIPO)”).

379. E.g., H.R. REP. NO. 106-349, pt. 1, at 16 (1999).

380. Heald & Sherry, *supra* note 18, at 1177–78; see also Patry, *supra* note 17, at 394–97 (criticizing a bill for effectively providing a property right in databases without requiring originality, “any real effort or systematic organization,” or “investment of substantial monetary resources”).

381. See Pollack, *supra* note 15, at 61 (“Market failure . . . might be sufficient reason to allow the Commerce Clause to ground time-limited protection for an unoriginal work *because market failure allows a well-grounded conclusion that Congress is not doing an end run around the Intellectual Property Clause*—both in the sense of Congress’ intent and in the sense that the result is unlikely to harm the avowed purpose of the Intellectual Property Clause, the progress of science and useful arts.”).

means, meaning no protection can be extended for databases that are insufficiently original. If their purpose is just the latter, however, then Congress has a wide berth to legislate to protect databases. Moreover, if the laws have both purposes, Congress may constitutionally enact them only if it sets out clear and convincing evidence that commercial interests dictate superseding the IP Clause's external limitations, a requirement that will be very difficult to satisfy if the laws subvert the IP Clause's means rather than merely supplementing them. Overall, which structural purpose is at issue in any given piece of legislation depends heavily on the legislation's particulars. For example, if a database-protection law were to prohibit only business competitors from extracting information from a database without authorization, that fact would suggest that the law was occupied with promoting commerce by encouraging investment in database development.³⁸² By contrast, the same inference would be absent if the law were to prevent anyone from extracting information, even for noncompetitive purposes; in that case, the law would be less about promoting commerce and more about promoting the progress of science and useful arts.³⁸³ Similarly, one could make the case that a law protecting people who put a substantial investment into creating any sort of database—not just people who make a creative or technical contribution—is less interested in promoting the progress of science and useful arts than in encouraging commerce.³⁸⁴ Whatever the outcome, the framework for evaluating the IP Clause's external limitations crisply queues up the issues that must be answered.

E. Federal Funding of Artistic and Scientific Works

Possibly the most prominent category of federal action that raises constitutional concerns in light of the IP Clause's external limitations is federal funding of artistic and scientific works. As this Section shows, this practice seems to be constitutionally proper, if not

382. Cf. Benkler, *supra* note 16, at 597 (arguing that “[i]f in fact the important governmental interest is to prevent undercutting of database producers by competitors who provide the same product without paying the cost of its development,” then a provision that would extend beyond “competition among producers of the same product” to affect “producers of different products to the extent that one product is an improvement of, or uses as an input some of, the other product” would be “unnecessarily broad”).

383. See *id.* at 596–97 (observing that if a particular bill “aims to prohibit use by users who are not competitors, then the law is not an unfair competition law, but a property right, which cannot be passed outside the Intellectual Property Clause”).

384. E.g., J.H. Reichman & Pamela Samuelson, *Intellectual Property Rights in Data?*, 50 VAND. L. REV. 51, 54–55 (1997).

because of the Spending Clause, then because of the Necessary and Proper Clause.

General federal funding of the arts is of relatively modern vintage. In the nation's early years, few observers agreed that government ought to play a role in funding art; private parties funded it instead.³⁸⁵ In the early twentieth century, the federal government occasionally funded art, not to support art itself but out of broader economic concerns, such as the desire to create employment through Works Progress Administration programs.³⁸⁶ In 1965, federal funding of the arts was made systematic when Congress instituted the National Foundation on the Arts and Humanities "to develop and promote a broadly conceived national policy of support for the humanities and the arts in the United States."³⁸⁷ The foundation was authorized to provide grants for artistic and literary works and for education in the arts and humanities.³⁸⁸ The material motivations for this funding were the centrality of arts and humanities to American citizens and the necessity "for the Federal Government to help create and sustain not only a climate encouraging freedom of thought, imagination, and inquiry but also the material conditions facilitating the release of this creative talent."³⁸⁹ By 1998, the foundation—now known as the National Endowment for the Arts—had distributed over \$3 billion in grants.³⁹⁰

Like federal support for the arts, general federal funding of scientific and technological research became systematic in the mid-twentieth century. Before that, the federal government would sometimes fund nonmedical research during wartime to develop military technologies, as it did with World War II's Manhattan

385. Note, *Standards for Federal Funding of the Arts: Free Expression and Political Control*, 103 HARV. L. REV. 1969, 1970 (1990).

386. *Id.* Similarly, the Central Intelligence Agency secretly funded and promoted American modern art in an attempt to establish preeminence over the Soviet Union. Frances Stonor Saunders, *Modern Art Was CIA 'Weapon,'* INDEPENDENT (Oct. 22, 1995), <http://www.independent.co.uk/news/world/modern-art-was-cia-weapon-1578808.html>. These funding activities were not in the service of promoting the progress of science and useful arts; as such, they were outside the purview of the IP Clause's external limitations.

387. National Foundation on the Arts and the Humanities Act of 1965, Pub. L. No. 89-209, § 4(a)–(b), 79 Stat. 845, 846 (codified as amended at 20 U.S.C. § 953(a)–(b) (2006)).

388. *Id.* §§ 5–11, 79 Stat. at 846–54 (codified as amended at 20 U.S.C. §§ 954–960).

389. *Id.* § 2, 79 Stat. at 845 (codified as amended at 20 U.S.C. § 951).

390. *Nat'l Endowment for the Arts v. Finley*, 524 U.S. 569, 574 (1998).

Project.³⁹¹ Even though this research would often trickle down to public uses, the funding was initiated to support the federal government's military function.³⁹² Vannevar Bush, who was involved in the Manhattan Project, proposed that the government begin funding, through a federal agency, scientific research done by universities and other research centers during peacetime.³⁹³ As a result, in 1950, Congress created the National Science Foundation (NSF).³⁹⁴ Among the goals established for the NSF by Congress were "to initiate and support basic scientific [and engineering] research and programs to strengthen scientific [and engineering] research potential and . . . education programs" and "to foster the interchange of scientific and engineering information among scientists and engineers in the United States and foreign countries."³⁹⁵ Moreover, Congress articulated that it was founding the NSF because "the Nation's capacity to conduct high quality research and education programs and to maintain its competitive position at the forefront of modern science, engineering, and technology [was being] threatened by [a] research capital deficit."³⁹⁶ As of 2010, the NSF was funding about half of colleges' and universities' basic nonmedical-research activities.³⁹⁷

The federal government has a longer history of funding medical research. In 1878, Congress appropriated funds for "investigating the origin and causes of epidemic diseases, especially yellow fever and cholera."³⁹⁸ The next year, Congress created the National Board of Health, the federal government's first general and organized funder

391. See generally THE MANHATTAN PROJECT (Cynthia C. Kelly ed., 2009) (compiling accounts of the Manhattan Project, from its genesis through its aftermath).

392. Other funding for military technology provided earlier in the United States' history, such as funding for the appointment of teachers of arts and sciences for military instruction, Sidney Forman, *Why the United States Military Academy Was Established in 1802*, 29 MILITARY AFF. 16, 22 (1965), similarly had no material structural purpose of promoting the progress of science and useful arts.

393. Jeffrey A. Hart, *Organizational Cultures in U.S. Research-Oriented Universities*, in ADAPTING UNIVERSITIES TO THE GLOBAL SOCIETY—A TRANSATLANTIC PERSPECTIVE 143, 143–44 (Charles F. Bonser ed., 2009).

394. National Science Foundation Act of 1950, Pub. L. No. 81-507, § 2, 64 Stat. 149, 149 (codified at 42 U.S.C. § 1861 (2006)).

395. 42 U.S.C. § 1862(a)(1), (3) (2006).

396. *Id.* § 1862a(a)(3).

397. Eve Heafey, *Public Access to Science: The New Policy of the National Institutes of Health in Light of Copyright Protections in National and International Law*, 14 UCLA J.L. & TECH., no. 2, 2010, at 1, 46.

398. Act of Dec. 21, 1878, Res. No. 2, 20 Stat. 487.

of medical research.³⁹⁹ Having since changed its name to the National Institutes of Health, the agency provides funding for a wide variety of medical research,⁴⁰⁰ approximating \$31.2 billion annually.⁴⁰¹

Funding for scientific and technological research also comes through the military—for example, through the Defense Advanced Research Projects Agency.⁴⁰² This funding is concerned with developing technologies to promote national security.⁴⁰³

When otherwise-copyrightable works are produced pursuant to these grants, the copyright law does not speak expressly about whether such works are copyrightable. The legislative history to the 1976 revision of the Copyright Act, however, states that either Congress or the agency responsible for the funding may decide whether to allow the funded party to secure copyright in the funded works.⁴⁰⁴ Nonetheless, one commentator points to a federal policy “favoring broad copyrightability in federally supported works.”⁴⁰⁵ Following federal grants in both arts and sciences, the government typically allows the grantee to copyright resulting work—including articles discussing research—with the government reserving a royalty-free, nonexclusive license.⁴⁰⁶

399. *Id.*

400. See 42 U.S.C. §§ 241, 282 (2006) (empowering the director of the National Institutes of Health to undertake research activities).

401. *NIH Budget*, NAT'L INSTS. HEALTH, <http://www.nih.gov/about/budget.htm> (last visited Mar. 19, 2012).

402. See *generally History*, DEF. ADVANCED RESEARCH PROJECTS AGENCY, <http://www.darpa.mil/About/History/History.aspx> (last visited Mar. 19, 2012) (providing a brief overview of the history of the Defense Advanced Research Projects Agency and including links to further information).

403. See *Our Work*, DEF. ADVANCED RESEARCH PROJECTS AGENCY, http://www.darpa.mil/our_work (last visited Mar. 19, 2012) (“The Defense Advanced Research Projects Agency (DARPA) was established in 1958 to prevent strategic surprise from negatively impacting U.S. national security and create strategic surprise for U.S. adversaries by maintaining the technological superiority of the U.S. military.”).

404. H.R. REP. NO. 94-1476, at 59 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5672. Opponents of copyright protection maintain that it is a “double subsidy” atop the funding that spurred the creation, whereas proponents argue that it is an important incentive to funded works’ “creation and dissemination.” *E.g., id.* (internal quotation marks omitted). See *generally* Samuel E. Trosow, *Copyright Protection for Federally Funded Research: Necessary Incentive or Double Subsidy?*, 22 CARDOZO ARTS & ENT. L.J. 613, 648–71 (2004) (summarizing “the initial reactions . . . from the various stakeholders” to a bill proposed by Representative Martin Olav Sabo in 2003 that would have amended the copyright rules applicable to federally funded works).

405. Trosow, *supra* note 404, at 621–22.

406. *E.g.*, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB

Since 1980, patent law has similarly allowed nonprofit, university, and small-business grantees to patent inventions resulting from federal grants after the inventors have complied with various formalities.⁴⁰⁷ Before this scheme was implemented, the federal government would typically own the rights to these inventions and would either commit them to the public domain or freely license resulting patents nonexclusively to interested parties.⁴⁰⁸

Could this extensive funding of artistic and scientific works be unconstitutional in light of the IP Clause's external limitations? Recall that the Founders rejected just this sort of funding as a means of promoting the progress of science and useful arts,⁴⁰⁹ and the First Congress was worried about its constitutional ability to fund scientific research.⁴¹⁰ Nonetheless, even if the Spending Clause does not permit this funding, the Necessary and Proper Clause likely does.

Indeed, the Federal Circuit has rejected the notion that such funding is unconstitutional.⁴¹¹ In an analysis directly contrary to this Article's reasoning, that court has reasoned that

Art. I, § 8, cl. 8 does not state that the Government may promote the progress of the useful arts *only* through the patent and copyright system. Ample constitutional power for Government funding of research and development can be found in art. I, § 8, cl. 1 (provide for the common Defense and general Welfare), cl. 3 (Commerce), cl. 12 (Army), cl. 13 (Navy) and cl. 18 (necessary and proper clause).⁴¹²

Circular A-110), 2 C.F.R. § 215.36 (2011); NAT'L SCI. FOUND., NSF GRANT POLICY MANUAL, at VII-16 to -17 (2005), *available at* http://www.nsf.gov/pubs/manuals/gpm05_131/gpm05_131.pdf; U.S. DEP'T OF HEALTH & HUMAN SERVS., NIH GRANTS POLICY STATEMENT, at IIA-85 to -87 (2011), *available at* http://grants.nih.gov/grants/policy/nihgps_2011/nihgps_2011.pdf.

407. Bayh-Dole Act, Pub. L. No. 96-517, sec. 6, § 202, 94 Stat. 3015, 3020 (1980) (codified as amended at 35 U.S.C. § 202 (2006)).

408. See Rebecca S. Eisenberg, *Public Research and Private Development: Patents and Technology Transfer in Government-Sponsored Research*, 82 VA. L. REV. 1663, 1663 (1996) ("[L]egislation [prior to a pair of statutes passed in 1980] had typically encouraged or required that federal agencies sponsoring research make the results widely available to the public through government ownership or dedication to the public domain."). The law was changed to improve the dissemination of inventions resulting from funded research by providing a greater incentive to commercialize. S. REP. NO. 96-480, at 3 (1979).

409. See *supra* Part I.B.1.

410. See *supra* text accompanying notes 116–27.

411. *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1565 (Fed. Cir. 1988).

412. *Id.*

The court then concluded that federal funding for research and development also falls within the Spending Clause's purview.⁴¹³

Yet as this Article maintains, the text, structure, history, judicial doctrine, and policy surrounding the IP Clause yield a plausible argument that the Spending Clause is in fact limited externally by the IP Clause.⁴¹⁴ If that argument is correct, then federal funding of artistic and scientific works—which is done to promote the progress of science and useful arts—would seem to be impermissible because it falls outside of the IP Clause's limited means. At the same time, however, given how expansively the Supreme Court has interpreted the Spending Clause,⁴¹⁵ the Court very well might not allow the IP Clause to limit Congress's spending power.

In any event, federal funding of artistic and scientific works, as typically structured, is almost certainly constitutionally authorized by the Necessary and Proper Clause. As I analyze in Part II.B.3, the Necessary and Proper Clause authorizes Congress to promote the progress of science and useful arts through means other than those specified in the IP Clause, but only to support the Clause's means for the specified end.⁴¹⁶ Accordingly, as conventionally structured, federal funding of artistic and scientific works seeks to promote the progress of science and useful arts so as to secure exclusive rights to authors and inventors for limited times in their works. It does so by providing funding to authors and inventors to create their works in the first place and by enabling them generally—although not requiring them—to seek copyright and patent protection in those works as further incentive to create and disseminate them.⁴¹⁷ That congruency

413. *Id.*

414. *See supra* Part II.B.2.

415. *See supra* Part II.B.2.

416. *See supra* Part II.B.3.

417. I do not mean to say that any and all means not enabled by the IP Clause can be enacted pursuant to the Necessary and Proper Clause. Some means are too tenuously related to the IP Clause's means and ends to qualify. For example, something maintained as a trade secret cannot be patented. *See* 35 U.S.C. § 102(g) (2006) (disallowing an inventor a patent when "another inventor . . . establishes . . . that before [the filing person's] invention thereof the invention was made by such other inventor and not abandoned, *suppressed*, or *concealed*" (emphasis added)); *Apotex USA, Inc. v. Merck & Co.*, 254 F.3d 1031, 1038–39 (Fed. Cir. 2001) ("Even though there is no explicit disclosure requirement in § 102(g), the spirit and policy of the patent laws encourage an inventor to take steps to ensure that 'the public has gained knowledge of the invention which will insure its preservation in the public domain' or else run the risk of being dominated by the patent of another." (quoting *Palmer v. Dudzik*, 481 F.2d 1377, 1387 (C.C.P.A. 1973))). Because a trade secret cannot lead to a patent except in a tenuous way,

between the IP Clause's means and ends is as much as the Necessary and Proper Clause requires; by maintaining that congruency, the Necessary and Proper Clause enables a law that is "'convenient, or useful' or 'conducive' to the [underlying] authority's 'beneficial exercise.'"⁴¹⁸ In fact, federal funding for scientific works was perhaps more constitutionally problematic before 1980, when rights to research vested in the federal government, not in inventors. When that vesting occurred, the funding was not promoting exclusive rights to inventors, as the Necessary and Proper Clause seems to require when constrained by the IP Clause's external limitations.

In sum, the vast practice of federal funding of artistic and scientific works, as commonly structured, seems to lie well within Congress's authority.

* * *

As this Part shows, the constitutionality of a number of federal laws is left in doubt by the IP Clause's external limitations, particularly the federal trade-secrecy and antitrust laws. By contrast, federal funding of artistic and scientific works is likely constitutional. Moreover, the Supreme Court's interpretation of the IP Clause in upholding the copyright-restoration laws obviated any clash between the IP Clause and other constitutional sources of congressional authority. Even when the analytical framework proposed herein does not yield an obvious, clear-cut answer as to a law's constitutionality, as it does with the proposed database-protection legislation, the framework still sharpens and focuses the issues to be resolved.

CONCLUSION

This Article relies on the text, structure, and history of the IP Clause, as well as subsequent governmental activity, Supreme Court doctrine, and policy, to show that the IP Clause operates to forbid Congress from using its other powers "To promote the Progress of Science and useful Arts" through laws that reach beyond the scope of the IP Clause's prescription to "secur[e] for limited Times to Authors

protection of trade secrecy, *see supra* Part III.A, cannot be proper under the Necessary and Proper Clause.

418. *United States v. Comstock*, 130 S. Ct. 1949, 1956 (2010) (quoting *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 413, 418 (1819)).

and Inventors the exclusive Right to their respective Writings and Discoveries.” This evidence shows that if Congress seeks, via legislation, to promote the progress of science and useful arts, the only way it can do so is by enacting laws that secure to authors and inventors exclusive rights in their writings and discoveries for limited times. This Article provides an analytical framework under which courts, legislators, and others could assess the constitutionality of federal legislation. If the structural purpose of a law is to promote the progress of science and useful arts, the law may use only the means specified in the IP Clause to pursue that purpose. This understanding of external limitations imposed by the IP Clause yields varying collisions with other constitutional provisions, primarily the Commerce, Spending, and Necessary and Proper Clauses and the treaty powers. To evaluate laws that have multiple constitutional purposes, a presumption ought to exist against the constitutionality of laws that promote the IP Clause’s ends but subvert its means, a presumption that may be overcome only by clear and convincing evidence that Congress intentionally chose to supersede the IP Clause’s means because of paramount, legitimate interests pursuant to its other more permissive powers. This presumption ought to be extremely difficult to overcome when a law’s means interfere with the IP Clause’s means instead of merely diverging from the means included in the IP Clause. This Article’s framework suggests that a number of existing federal laws, such as federal trade-secrecy provisions and antibootlegging laws, might be unconstitutional. The framework also suggests how to assess the constitutionality of laws that would protect databases, laws passed pursuant to international agreements, and federal funding for scientific and artistic works.